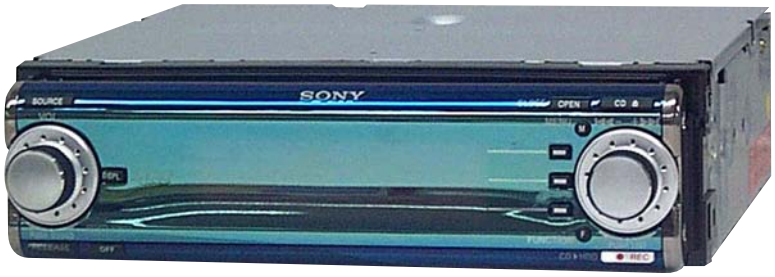
MEX-1HD

SERVICE MANUAL

Ver 1.3 2004.02

US Model
Canadian Model
E Model
Australian Model



Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-550D-156
Optical Block Name	CDM-3021EBG
Optical Pick-up Name	DAX-21EG

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS
(US model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

CD Player section

Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz

"MG Memory Stick" section

Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Recording time (when using the supplied 64MB "MagicGate Memory Stick")	
	Approx. 60 min. (132kbps)
	Approx. 80 min. (105kbps)
Recording format	Adaptive Transform Acoustic Coding 3 (ATRAC3)

HDD section

Capacity	10 GB
Recording format	Adaptive Transform Acoustic Coding 3 (ATRAC3)
Frequency response	20 to 20,000 Hz (single signal measurement)

Tuner section

FM

Tuning range	87.5 – 107.9 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	66 dB (stereo), 72 dB (mono)
Harmonic distortion at 1 kHz	0.6 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	52 W × 4 (at 4 ohms)

General

Outputs	Audio outputs (front/rear) Subwoofer output (mono) Power antenna relay control terminal Power amplifier control terminal
Inputs	Telephone ATT control terminal Illumination control terminal AUX IN terminal Antenna input terminal
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Loudness	+8 dB at 100 Hz +2 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 182 mm ($7\ ^1/_8 \times 2 \times 7\ ^1/_4$ in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm ($7\ ^1/_4 \times 2\ ^1/_8 \times 6\ ^3/_8$ in.) (w/h/d)
Mass	Approx. 2.0 kg (4 lb. 7 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Cleaning cloth (1) Digital I/O cable (1)

Note
This unit cannot be connected to a digital preamplifier or an equalizer.

Design and specifications are subject to change without notice.

AUDIO LIBRARY SYSTEM

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2004B05-1
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e Vehicle Company
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Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes

- *The recorded music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.*
- *Sony is not responsible for music files that are not saved on this unit due to unsuccessful recording from CD or music downloading.*
- *Sony is not responsible for any files that are damaged or erased from the hard disc.*

Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs)

This unit can play the following discs:

Type of discs	Label on the disc
Audio CD	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable
MP3 files	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable COMPACT disc ReWritable

- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.
- You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.
- A CD-R/CD-RW to which a session can be added can be played.

** A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.*

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Notes on MP3 files

MP3 (MPEG 1 Audio Layer-3) is a standard technology and format for compressing a sound sequence. The file is compressed to about 1/10 of its original size. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed.

Notes on discs

You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.
The disc must be in the ISO 9660*1 level 1 or level 2 format, or Joliet or Romeo in the expansion format.
You can use a disc recorded in Multi Session*2.

*1 **ISO 9660 Format**
The most common international standard for the logical format of files and folders on a CD-ROM.
There are several specification levels. In Level 1, file names must be in the 8.3 format (no more than 8 characters in the name, no more than 3 characters in the extension ".MP3") and in capital letters. Folder names can be no longer than 8 characters. There can be no more than 8 nested folder levels. Level 2 specifications allow file names up to 31 characters long.
Each folder can have up to 8 trees.
For Joliet or Romeo in the expansion format, make sure of the contents of the writing software, etc.

*2 **Multi Session**
This is a recording method that enables adding of data using the Track-At-Once method. Conventional CDs begin at a CD control area called the Lead-in and end at an area called Lead-out. A Multi Session CD is a CD having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.
CD-Extra: The format which records audio (audio CD data) as tracks on session 1, and records data as tracks on session 2.
Mixed CD: In this format, data is recorded as track, and audio (audio CD data) is recorded as track 2.

Notes

- *With formats other than ISO 9660 level 1 and level 2, folder names or file names may not be displayed correctly.*
- *When naming, be sure to add the file extension ".MP3" to the file name.*
- *If you put the extension ".MP3" to a file other than MP3, the unit cannot recognize the file properly and will generate random noise that could damage your speakers.*
- *The following discs take a longer time to start playback.*
  – a disc recorded with a complicated tree structure.
  – a disc recorded in Multi Session.
  – a disc to which data can be added.

Cautions when playing a disc that is recorded in Multi Session

- *When the first track of the first session is audio CD data:*
  Only audio CD data is played back.
- *When the first track of the first session is not audio CD data:*
  – If an MP3 file is in the disc, only MP3 file(s) play back and other data is skipped. (Audio CD data is not recognized.)
  – If no MP3 file is in the disc, "NO Music" is displayed and nothing is played back. (Audio CD data is not recognized.)

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Laser Diode Properties

- Material: GaAlAs
- Wavelength: 780 nm
- Emission Duration: continuous
- Laser Output Power: less than 44.6 μW*

  * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

CHECKING THE VERSION BEFORE REPLACEMENT OF FLASH MEMORY (IC1030 ON MAIN BOARD)

This set is available with two types, Initial Lot type and User Upgrade type, depending on the software version used in the microcomputer.
If the Flash Memory (IC1030 on MAIN board) or mounted MAIN board was replaced, the work (*1) required after parts replacement is different according to the type. Therefore, before parts replacement, check the type of set, and then perform the work (*1) necessary for that type. However, if the version check is impossible because of a trouble in the set, handle it as a User Upgrade type.

*1: For the work required after parts replacement, refer to “Setup After Parts Replacement” and “Version Up After Microcomputer Software Related Parts Replacement” (page 22) in the following section.

Procedure for check the version:

1. Select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
2. Rotate the right jog dial (PUSH LIST) to select the “Version”, and press the right jog button (PUSH LIST) to enter the Version mode.
3. With the “Version” mode activated, press the right jog button (PUSH LIST), and the versions of Main, Sub, CD Servo will be displayed respectively. Check the version of “Main”.
   Version by type:
   Initial Lot type : 1.00.05
   User Upgrade type : 2.03.02

SETUP AFTER PARTS REPLACEMENT

This set requires the work such as microcomputer software version up, system ID setting and HDD formatting, if either of flash memory, microcomputer (or mounted MAIN, SUB, or SERVO board) and hard disk drive (HDD) was replaced.
Perform the work required by referring to the “Test mode”, if either of the following parts was replaced.

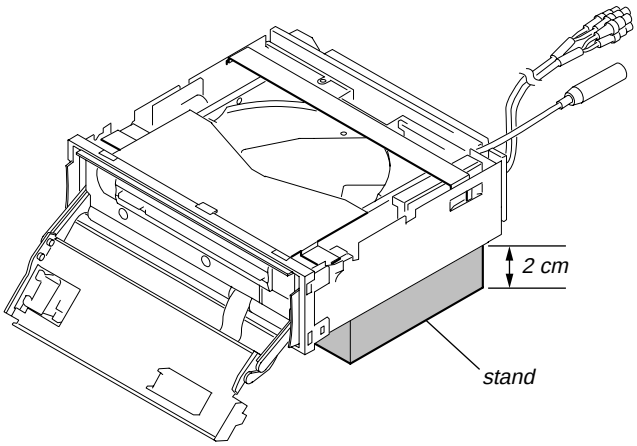
Replacement parts	Version up	System ID setting and HDD processing
Flash memory (IC1030 on MAIN board) *1	○	○
Microcomputer (IC501 on SUB board) *1	○	–
Flash memory (IC9 on SERVO board) *1	○	–
HDD	–	○ *2

*1: Including the case where the mounted board as a whole is replaced.
*2: Executing the HDD formatting causes the user’s recorded data to be all erased, and therefore be careful not to execute this operation by mistake if the HDD was not replaced.

Version up:
Refer to “Version Up After Microcomputer Software Related Parts Replacement”.
System ID setting and HDD processing:
Refer to “Relating with ID”.

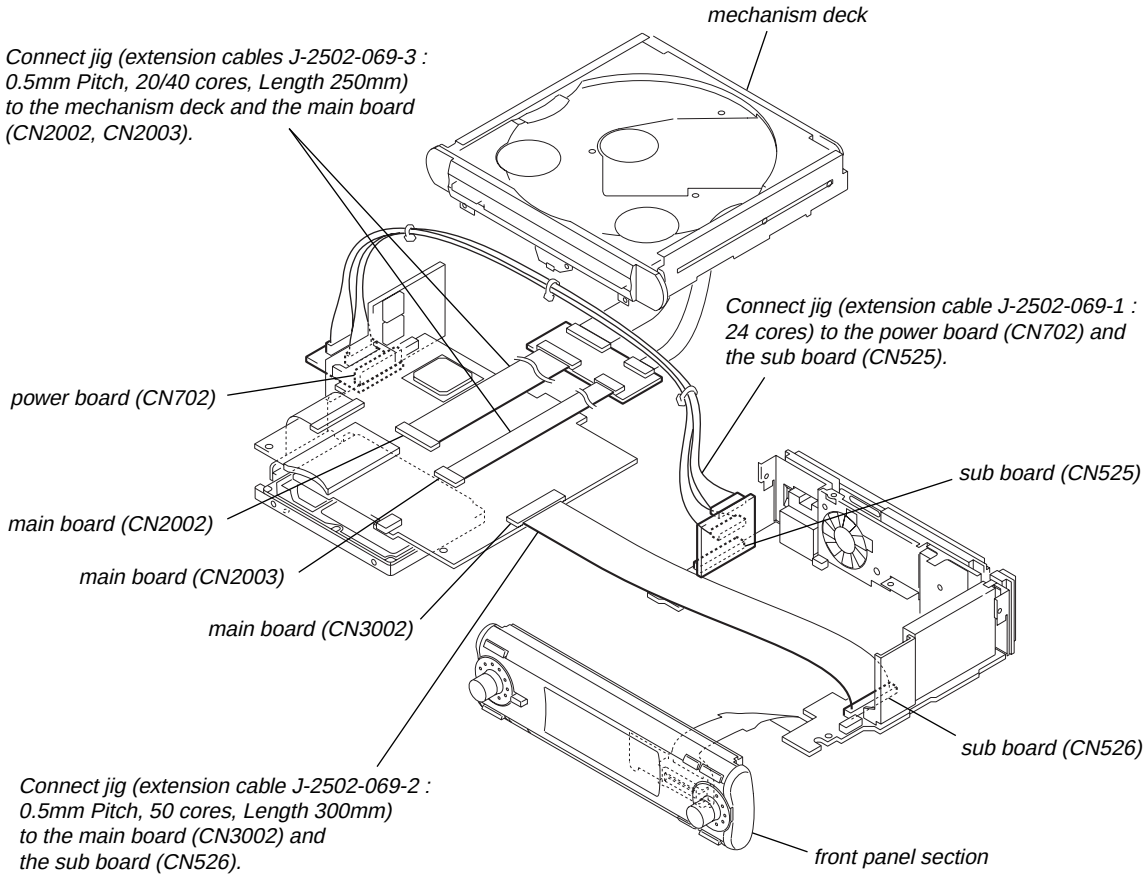
NOTE FOR THE OPENING OF THE FRONT PANEL

In this set, the front panel is lowered to below the bottom face when it is opened.
When servicing the set, place it on a stand having a height of about 2 cm.



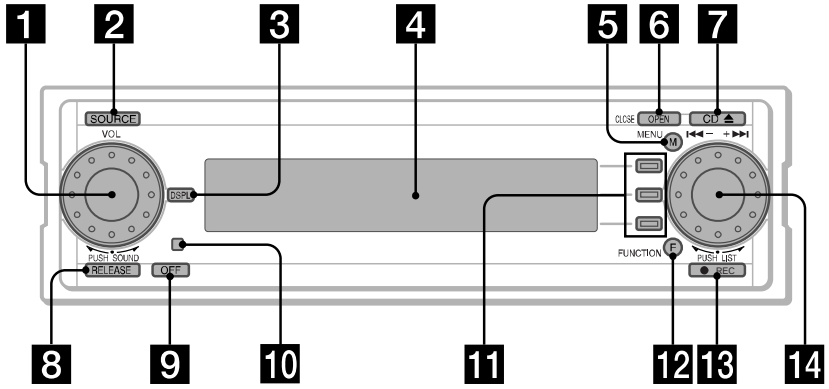
JIG ON REPAIRING

When repairing this set, connect the extension cables as the figure shown below.

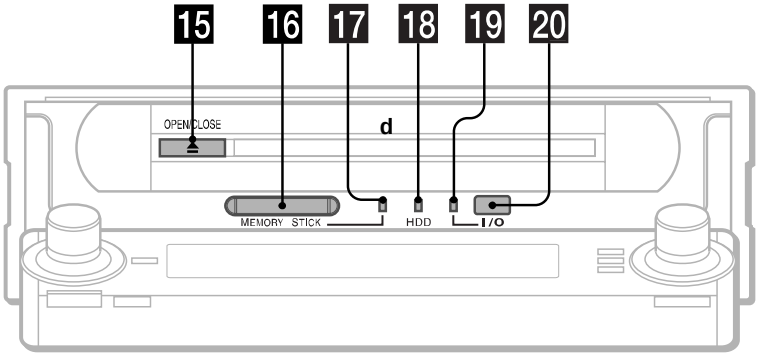

mechanism deck
Connect jig (extension cables J-2502-069-3 : 0.5mm Pitch, 20/40 cores, Length 250mm) to the mechanism deck and the main board (CN2002, CN2003).
Connect jig (extension cable J-2502-069-1 : 24 cores) to the power board (CN702) and the sub board (CN525).
power board (CN702)
sub board (CN525)
main board (CN2002)
main board (CN2003)
main board (CN3002)
sub board (CN526)
Connect jig (extension cable J-2502-069-2 : 0.5mm Pitch, 50 cores, Length 300mm) to the main board (CN3002) and the sub board (CN526).
front panel section

This section is extracted from instruction manual.

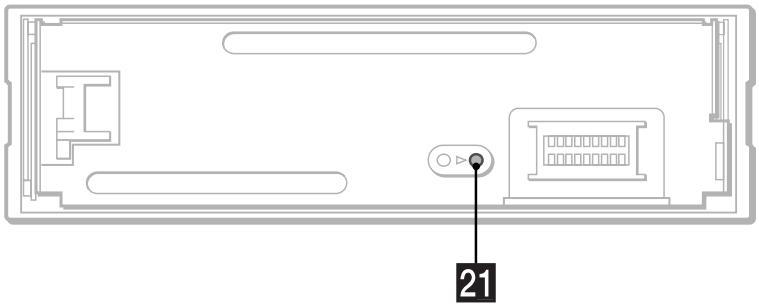
Location of controls



When the front panel is opened



When the front panel is remove



1 L (left) dial
Rotate to:
– Adjust the volume
– Select a sound item
Press to:
– Display the sound menu
– Enter a setting

2 SOURCE button
To select the source.

3 DSPL button

4 Display window

5 MENU button
To display the menus.

6 OPEN (CLOSE) button

7 CD ⏏ (eject) button

8 RELEASE button

9 OFF (Stop/Power off) button*

10 Receptor for remote commander

11 F1/F2/F3 buttons
These buttons have different functions depending on the situation.

12 FUNCTION button
To change the function menu.

13 ● REC button
For record settings/to start recording.

14 R (right) dial
Rotate to:
– Receive preset stations
– Skip tracks
– Select a menu item
Press to:
– Display the list
– Enter a setting

15 ⏏ (OPEN/CLOSE)

16 "MG Memory Stick" Slot

17 LED ("MG Memory Stick")
Lights up while the unit is accessing the "MG Memory Stick".

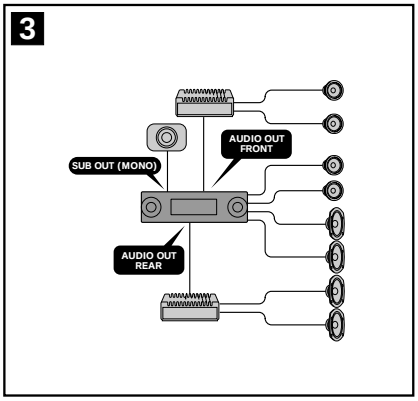
18 LED (HDD)
Lights up while the unit is accessing the HDD.

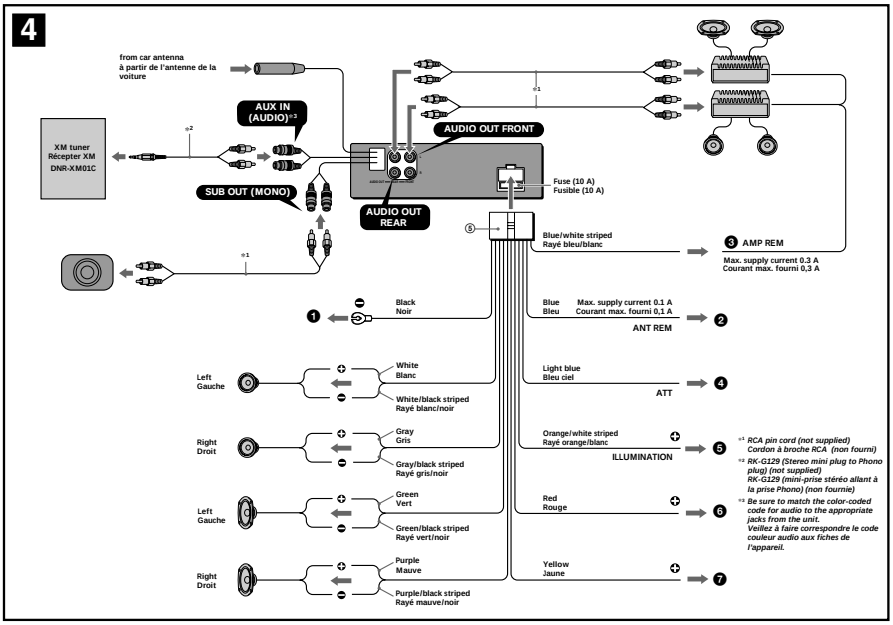
19 LED (I/O)
Lights up while the unit is accessing the Digital I/O.

20 Digital I/O terminal (4 pins)
To connect to the Network Walkman, etc.

21 RESET button

* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press (OFF) on the unit for 2 seconds to turn off the clock display.
Otherwise, the clock display does not turn off and causes battery drain.





Cautions

- This unit is designed for negative ground 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- **Run all ground wires to a common ground point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.
- The use of optical instruments with this product will increase eye hazard.

Notes on the power supply cord (yellow)

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

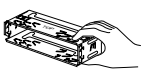
Before installation (1)

Do not install the unit where its operation interferes with driving.
Example:
— Opening and closing of the front panel or disc tray interfere with operation of the gear shift.
— With the front panel open, operation of hazard lamps, switches etc., is impaired.

Parts list (2)

The numbers in the list are keyed to those in the instructions.

Caution
Handle the bracket ① carefully to avoid injuring your fingers.



Connection example (3)

Note
Be sure to connect the ground cord before connecting the amplifier.

Connection diagram (4)

❶ **To a metal surface of the car**
- *First connect the black ground lead, then connect the yellow and red power input leads.*
- *Be sure to ground to the chassis of the car securely.*

❷ **To the power antenna control lead or power supply lead of antenna booster amplifier**
Notes
- *It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.*
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❸ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ **To the interface cable of a car telephone**

❺ **To a car's illumination signal**
Be sure to connect the black ground lead to it first.

❻ **To the +12 V power terminal which is energized in the accessory position of the ignition key switch**
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energised at all times.*
  Be sure to connect the black ground lead to it first.
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❼ **To the +12 V power terminal which is energised at all times**
Be sure to connect the black ground lead to it first.

Notes on the control and power supply leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.*
- *A power antenna without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

Pr cautions

- Cet appareil est exclusivement conçu pour fonctionner sur une tension de 12 V CC avec masse négative.
- Evitez de fixer des vis sur les câbles ou de coincer ceux-ci dans des pièces mobiles (par exemple, armature de siège).
- Avant d'effectuer des raccordements, éteignez le moteur pour éviter les courts-circuits.
- Raccordez les fils d'entrée d'alimentation **jaune** et **rouge** seulement après avoir terminé tous les autres raccordements.
- **Rassemblez tous les fils de terre en un point de masse commun.**
- Veillez à isoler avec du chatterton tout fil lâche non raccordé.

Remarques sur le cordon d'alimentation (jaune)

- Lorsque cet appareil est raccordé à d'autres appareils stéréo, la valeur nominale des circuits de la voiture raccordée doit être supérieure à la somme des fusibles de chaque appareil.
- Si aucun circuit de la voiture n'est assez puissant, raccordez directement l'appareil à la batterie.

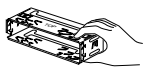
Avant l'installation (1)

N'installez pas l'appareil dans un endroit où il pourrait gêner le conducteur dans ses mouvements.
Exemple :
— dans un endroit où l'ouverture et la fermeture de la façade ou du plateau de disque pourraient nuire aux changements de vitesse ;
— dans un endroit où l'ouverture de la façade pourrait bloquer l'accès à l'interrupteur de feux de détresse et aux autres commandes.

Liste des composants (2)

Les numéros de la liste correspondent à ceux des instructions.

Attention
Manipulez avec précautions le support ① pour éviter de vous blesser aux doigts.



Exemple de raccordement (3)

Remarque
Raccordez d'abord le fil de masse avant de raccorder l'amplificateur.

Sch ma de raccordement (4)

❶ **À un point métallique de la voiture**
- *Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.*
- *Assurez-vous de relier solidement le châssis du véhicule à la masse.*

❷ **Vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne**
Remarques
- *Il n'est pas nécessaire de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir "Remarques sur les fils de commande et d'alimentation".*

❸ **Vers AMP REMOTE IN de l'amplificateur de puissance en option**
Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.

❹ **Vers le câble d'interface d'un téléphone de voiture**

❺ **Au signal d'éclairage de la voiture**
Raccordez d'abord le fil de masse noir.

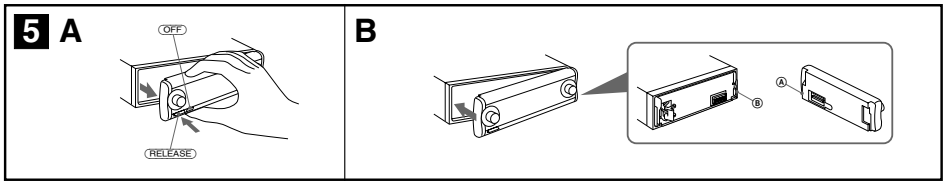
❻ **À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires**
Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le fil de masse noir.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir "Remarques sur les fils de commande et d'alimentation".*

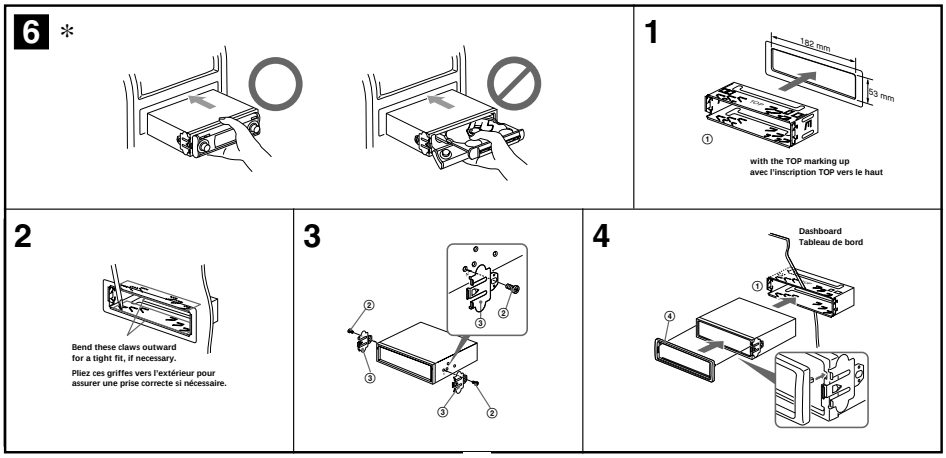
❼ **À la borne +12 V qui est alimentée en permanence**
Raccordez d'abord le fil de masse noir.

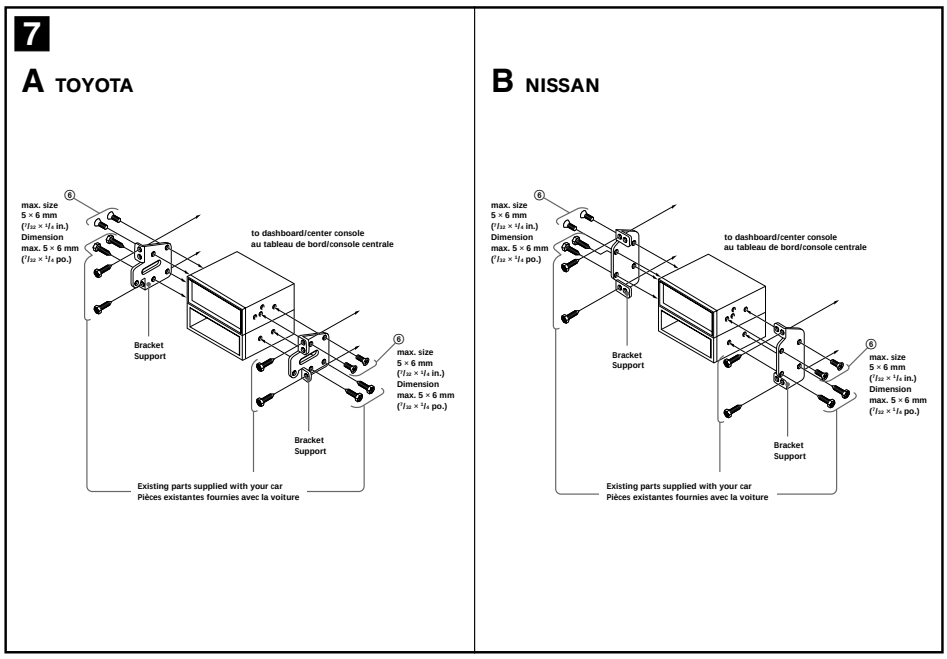
Remarques sur les fils de commande et d'alimentation
- *Le fil de commande de l'antenne électrique (bleu) fournit une alimentation de + 12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou le fil d'entrée d'alimentation des accessoires (rouge) à la borne de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité de manipulation adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleur au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de masse de cet appareil à la borne négative (–) du haut-parleur.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*







Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 30°.

How to detach and attach the front panel (5)

Before installing the unit, detach the front panel.

5-A To detach

Before detaching the front panel, be sure to press (OFF). Press (RELEASE) to open up the front panel and pull it off towards you.

5-B To attach

Attach part Ⓐ of the front panel to part Ⓑ of the unit as illustrated and push the left side into position until it clicks.

Mounting example (6)

Installation in the dashboard

When installing this unit, be sure to close the front panel of the unit. (6-a)

Do not hold the unit by its front panel or disc tray when installing as this can damage the unit, or cause malfunction.

Mounting the unit in a Japanese car (7)

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

Note

To prevent malfunction, install only with the supplied screws ⑥.

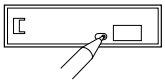
Warning when installing in a car without ACC (accessory) position on the ignition key switch

Be sure to press (OFF) on the unit for two seconds to turn off the clock display after turning off the engine.

When you press (OFF) only momentarily, the clock display does not turn off and this causes battery wear.

RESET button

When the installation and connections are completed, be sure to press the RESET button with a ball-point pen, etc., after removing the front panel.



Pr cautions

- Choisissez soigneusement l'emplacement d'installation pour que l'appareil ne gêne pas le chauffeur pendant la conduite.
- Evitez d'installer l'appareil dans un endroit exposé à la poussière, à la saleté, à des vibrations excessives ou à des températures élevées comme en plein soleil ou à proximité de conduits de chauffage.
- Pour garantir un montage sûr, n'utilisez que le matériel fourni.

R glage de l'angle de montage

Ajustez l'inclinaison à un angle inférieur à 30°.

Retrait et pose de la fa ade (5)

Avant d'installer l'appareil, retirez la façade.

5-A Pour retirer

Avant de déposer la façade, n'oubliez pas d'appuyer sur (OFF). Appuyez sur (RELEASE) pour ouvrir la façade, puis retirez-la en tirant vers vous.

5-B Pour poser

Fixez la partie Ⓐ de la façade sur la partie Ⓑ de l'appareil, comme indiqué sur l'illustration, puis poussez le côté gauche pour le mettre en place jusqu'au déclic.

Exemple de montage (6)

Installation dans le tableau de bord

Pendant l'installation de l'appareil, vérifiez que le panneau avant de cet appareil est fermé. (6-a)

Ne tenez pas l'appareil par la façade ou le plateau de disque lors de l'installation, car cela risque d'endommager l'appareil ou d'entraîner un problème de fonctionnement.

Installation de l appareil dans une voiture japonaise (7)

Cet appareil ne peut pas être installé dans certaines voitures japonaises. Consultez, dans ce cas, votre revendeur Sony.

Remarque

Pour éviter tout dysfonctionnement, utilisez uniquement les vis ⑥ pour le montage.

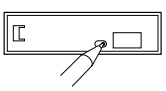
Avertissement en cas d installation dans une voiture dont le contact ne comporte pas de position ACC (accessoires)

N oubliez pas d appuyer sur le bouton (OFF) de l appareil pendant deux secondes apr s avoir coup le moteur de fa on d sactiver l affichage de l horloge.

Si vous appuyez brièvement sur (OFF), l'affichage de l'horloge n'est pas désactivé, ce qui provoque une usure de la batterie.

Touche RESET

Après avoir retiré la façade, une fois que l'installation et les raccordements sont terminés, appuyez sur la touche RESET avec un stylo à bille, etc.



SECTION 3
DISASSEMBLY

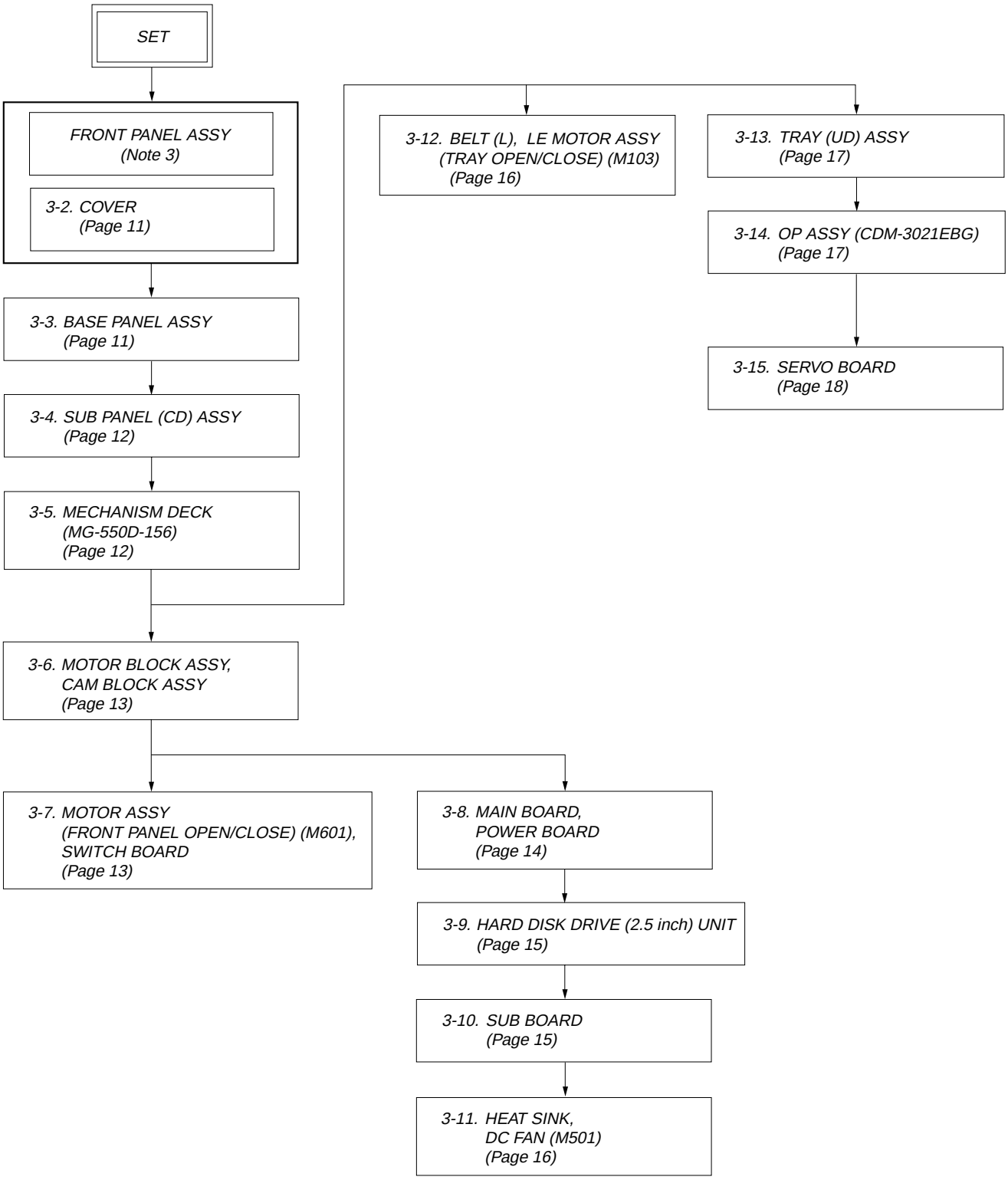
3-1. DISASSEMBLY FLOW

• This set can be disassembled in the order shown below.

Note 1: *The process described in* ⊟ *can be performed in any order.*

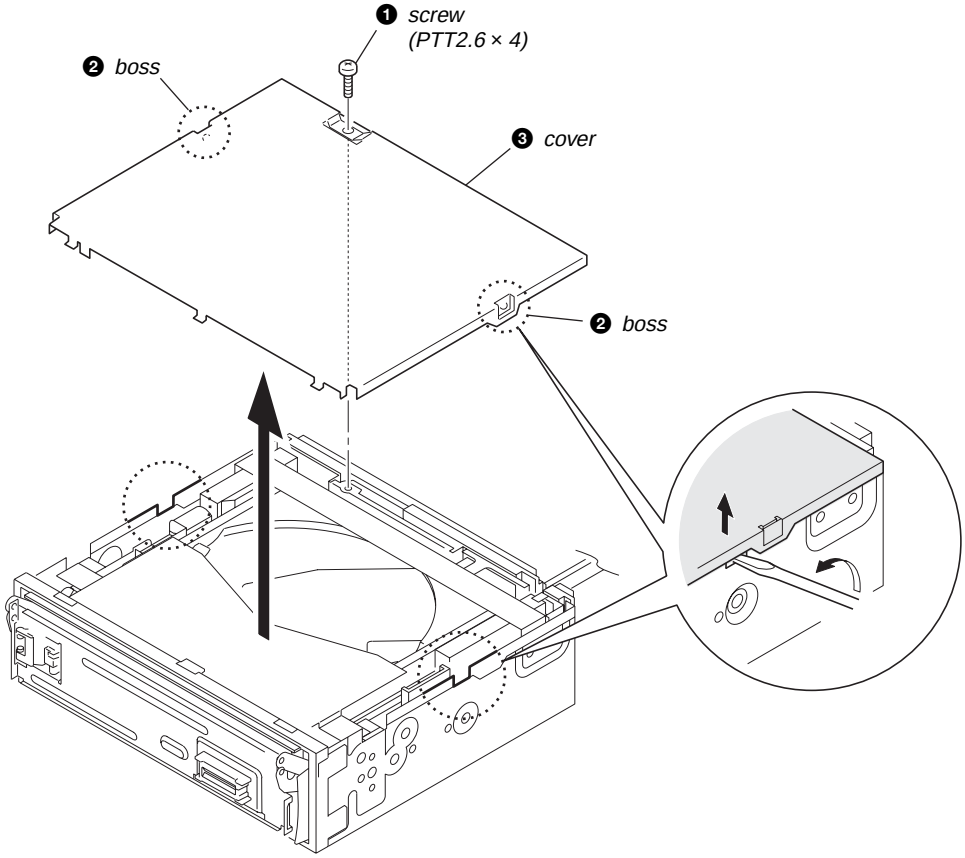
Note 2: *Without completing the process described in* ⊟ *, the next process can not be performed.*

Note 3: *Illustration of disassembly is omitted.*

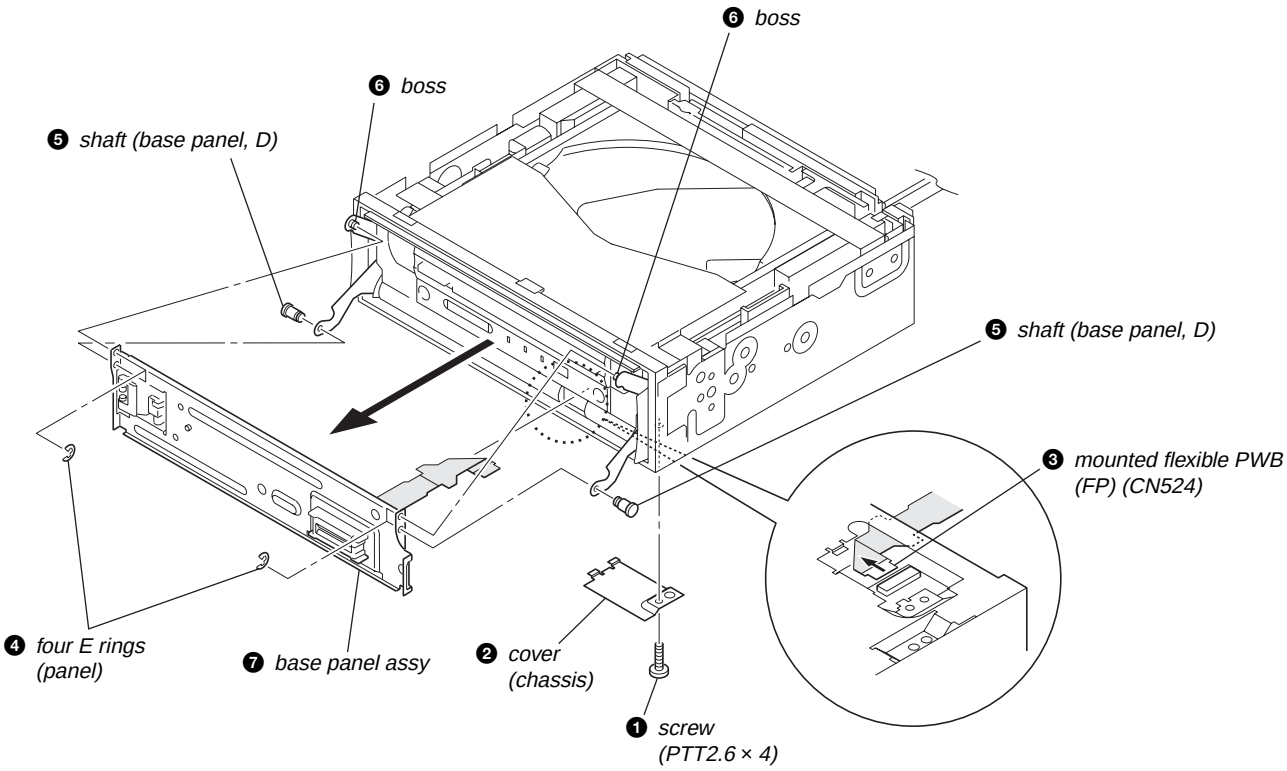


Note: Follow the disassembly procedure in the numerical order given.

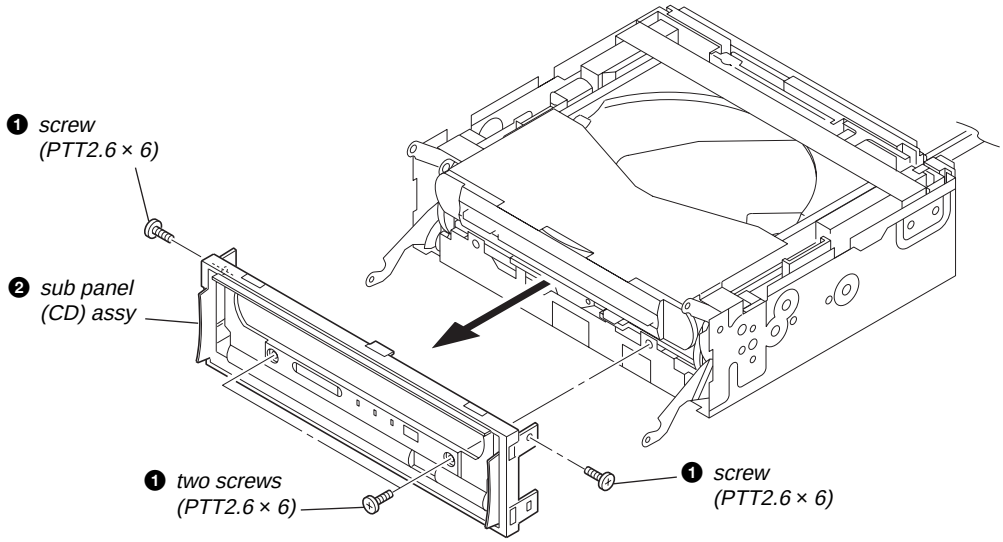
3-2. COVER



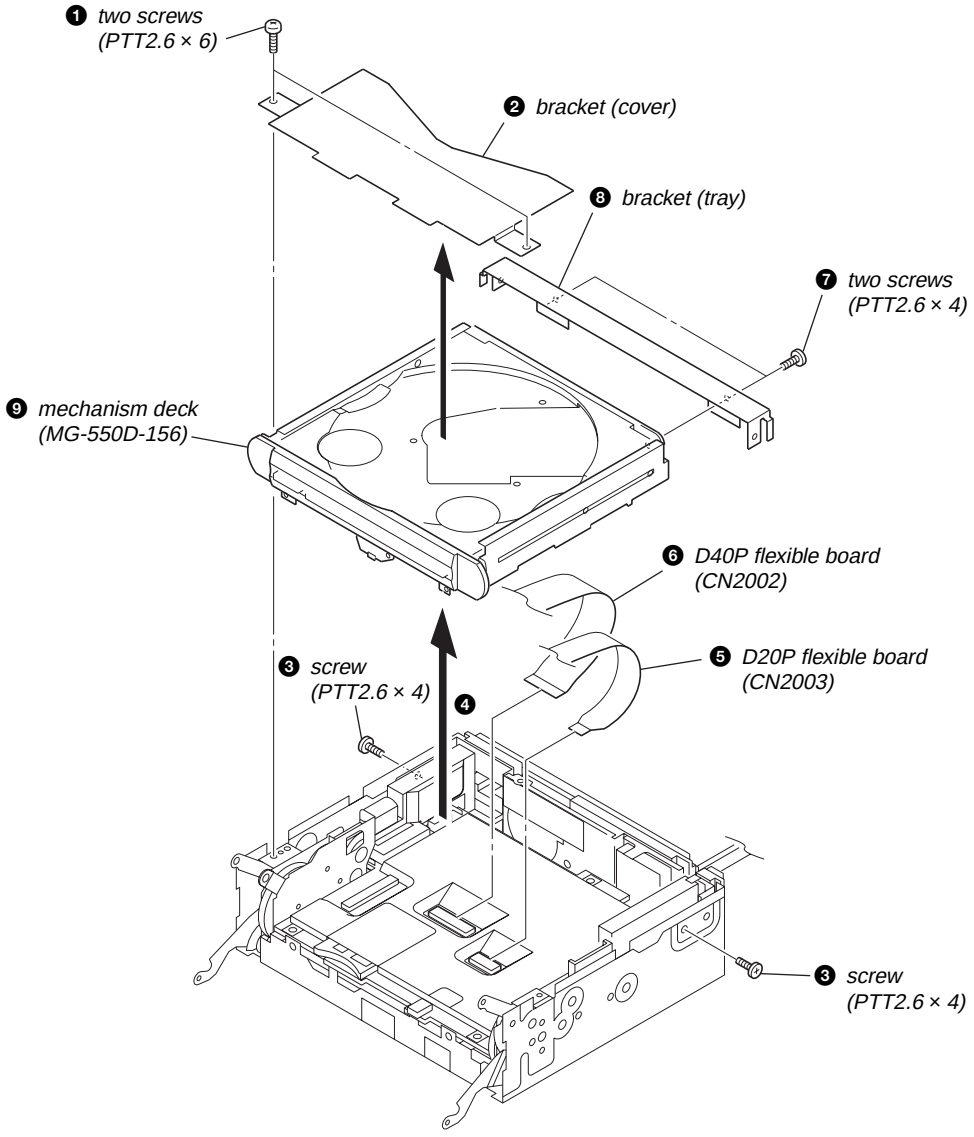
3-3. BASE PANEL ASSY



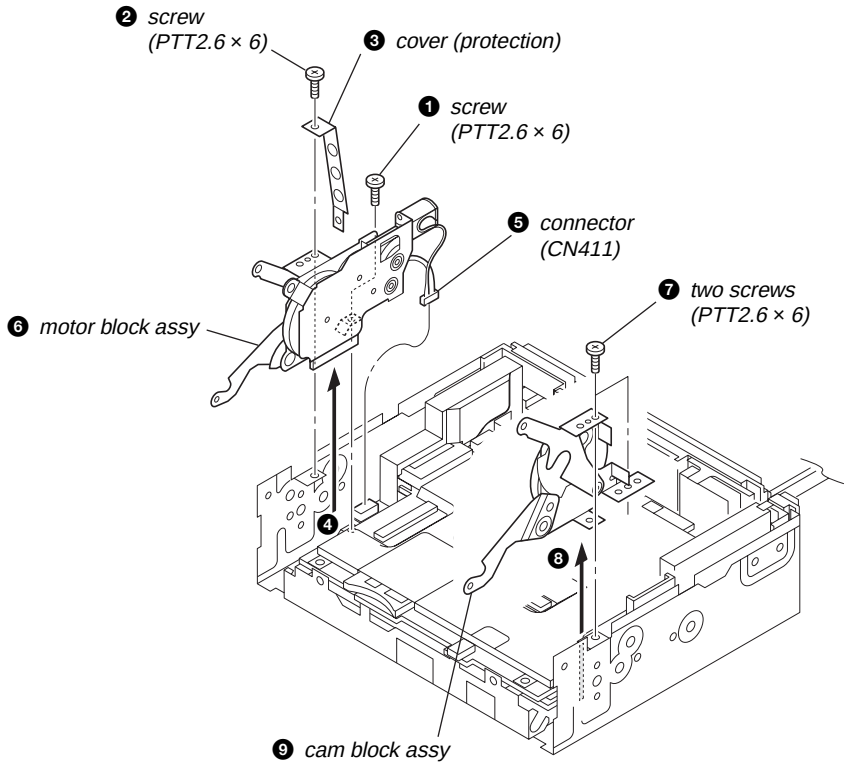
3-4. SUB PANEL (CD) ASSY



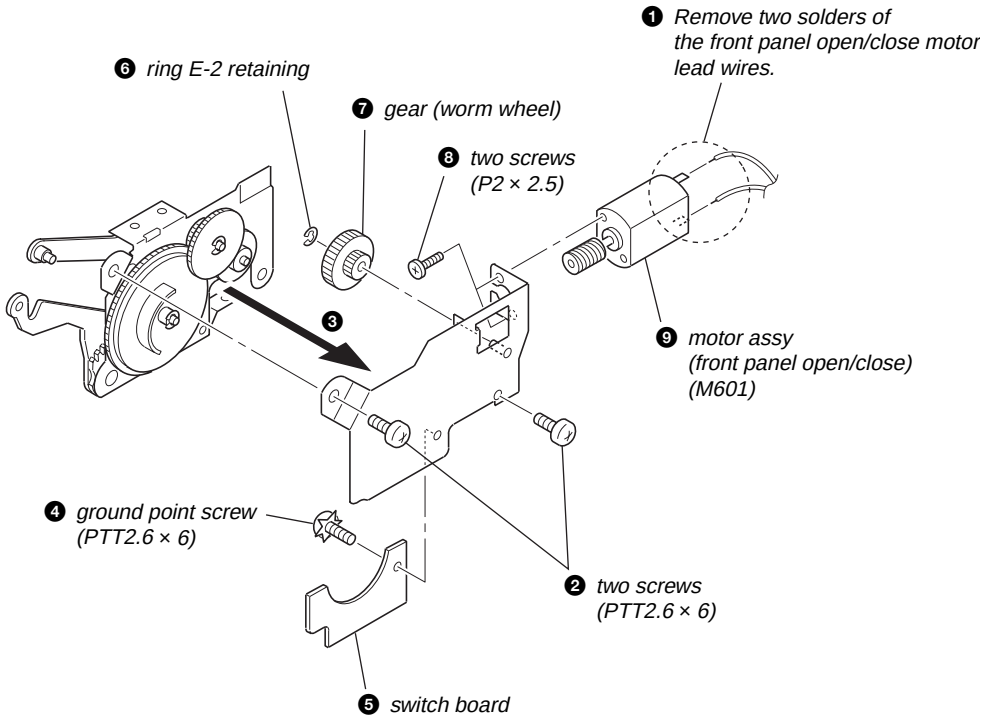
3-5. MECHANISM DECK (MG-550D-156)



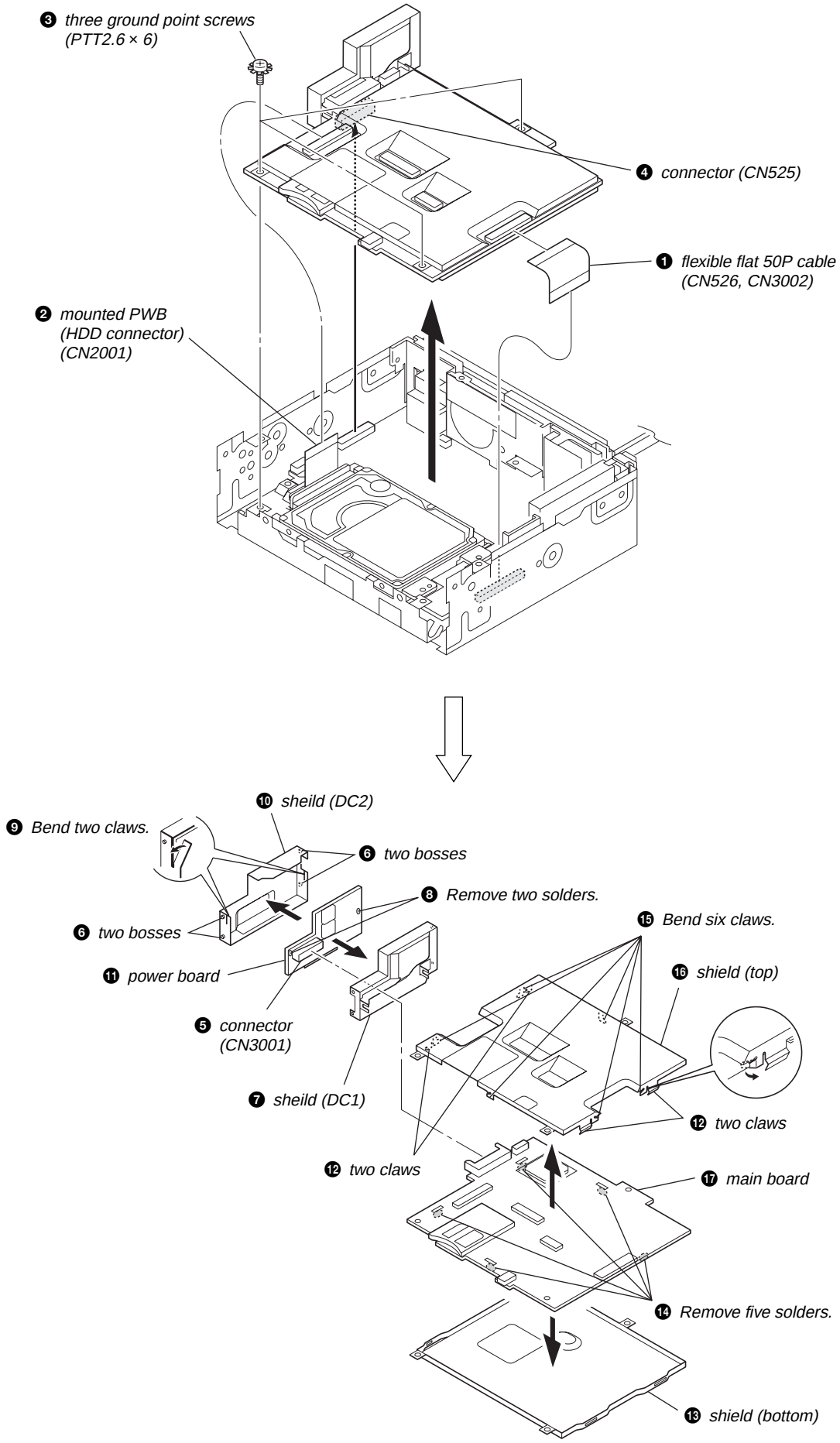
3-6. MOTOR BLOCK ASSY, CAM BLOCK ASSY



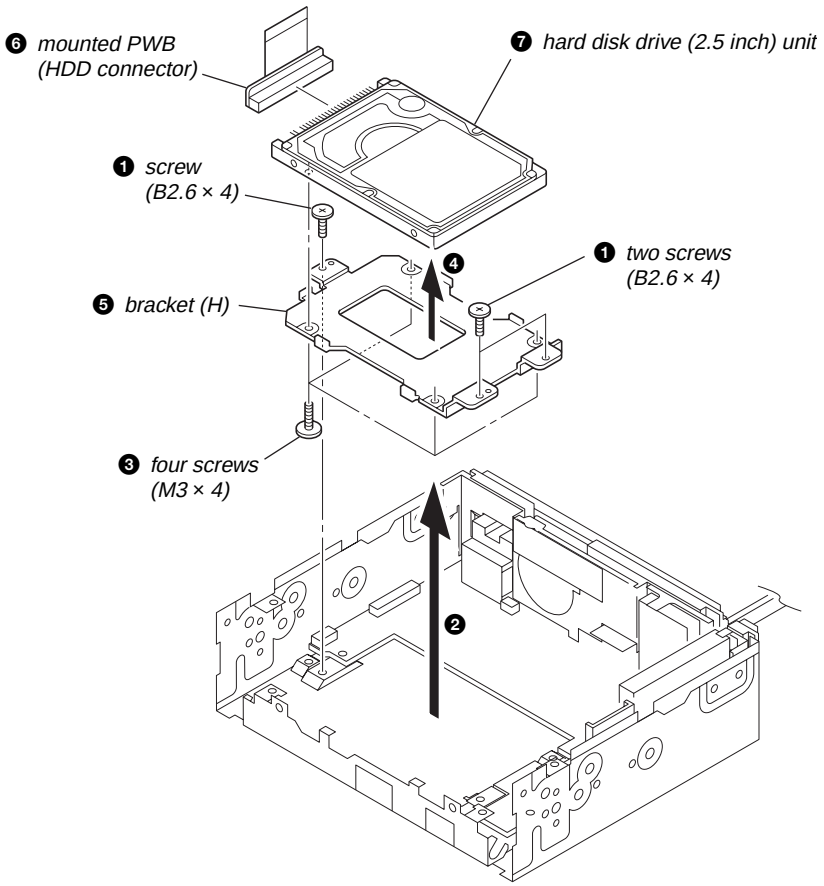
3-7. MOTOR ASSY (FRONT PANEL OPEN/CLOSE) (M601), SWITCH BOARD



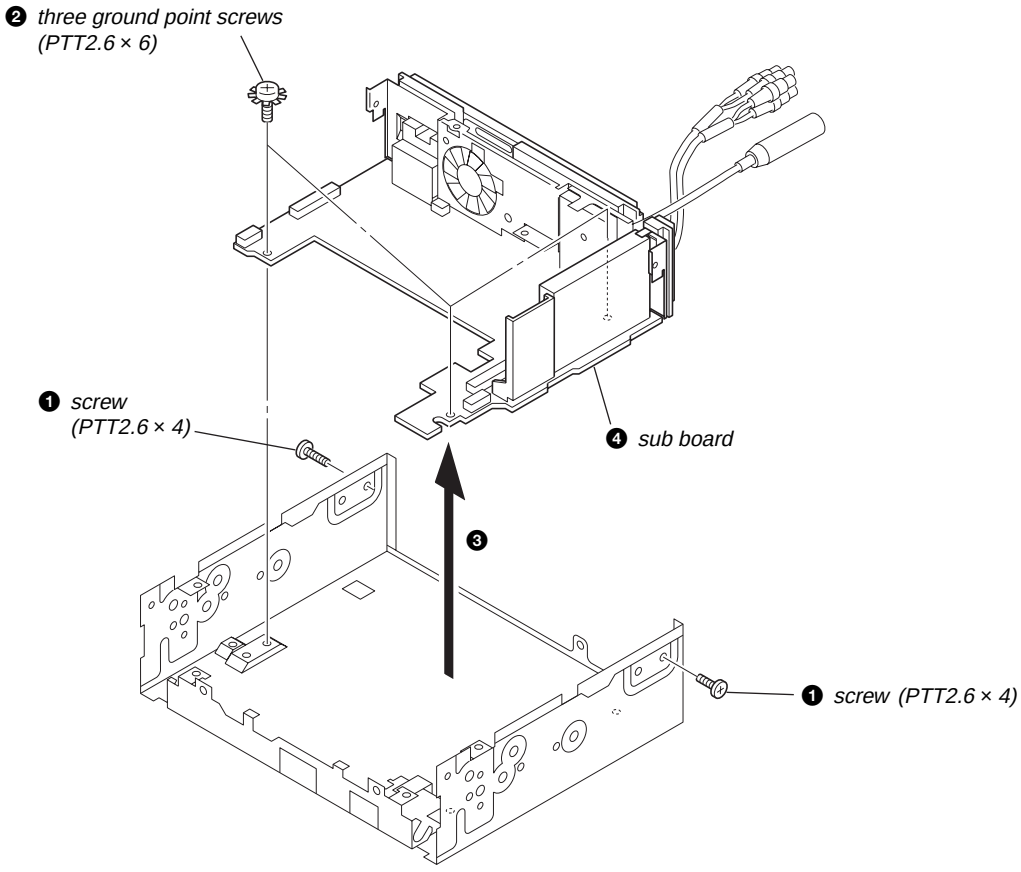
3-8. MAIN BOARD, POWER BOARD



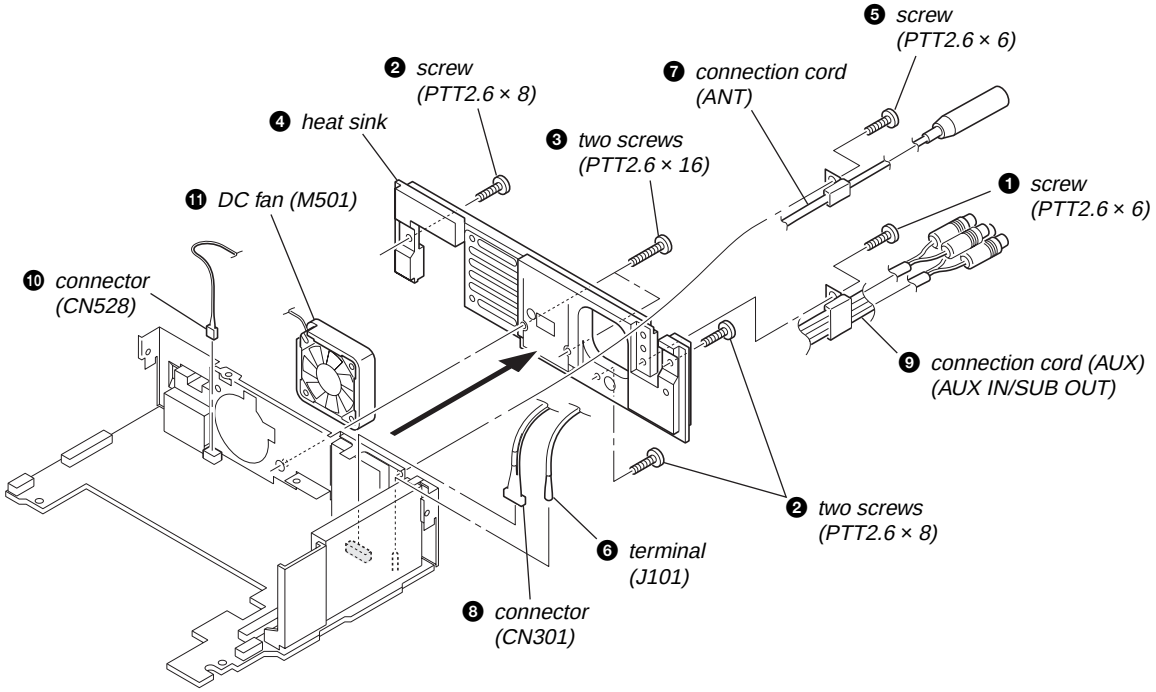
3-9. HARD DISK DRIVE (2.5 inch) UNIT



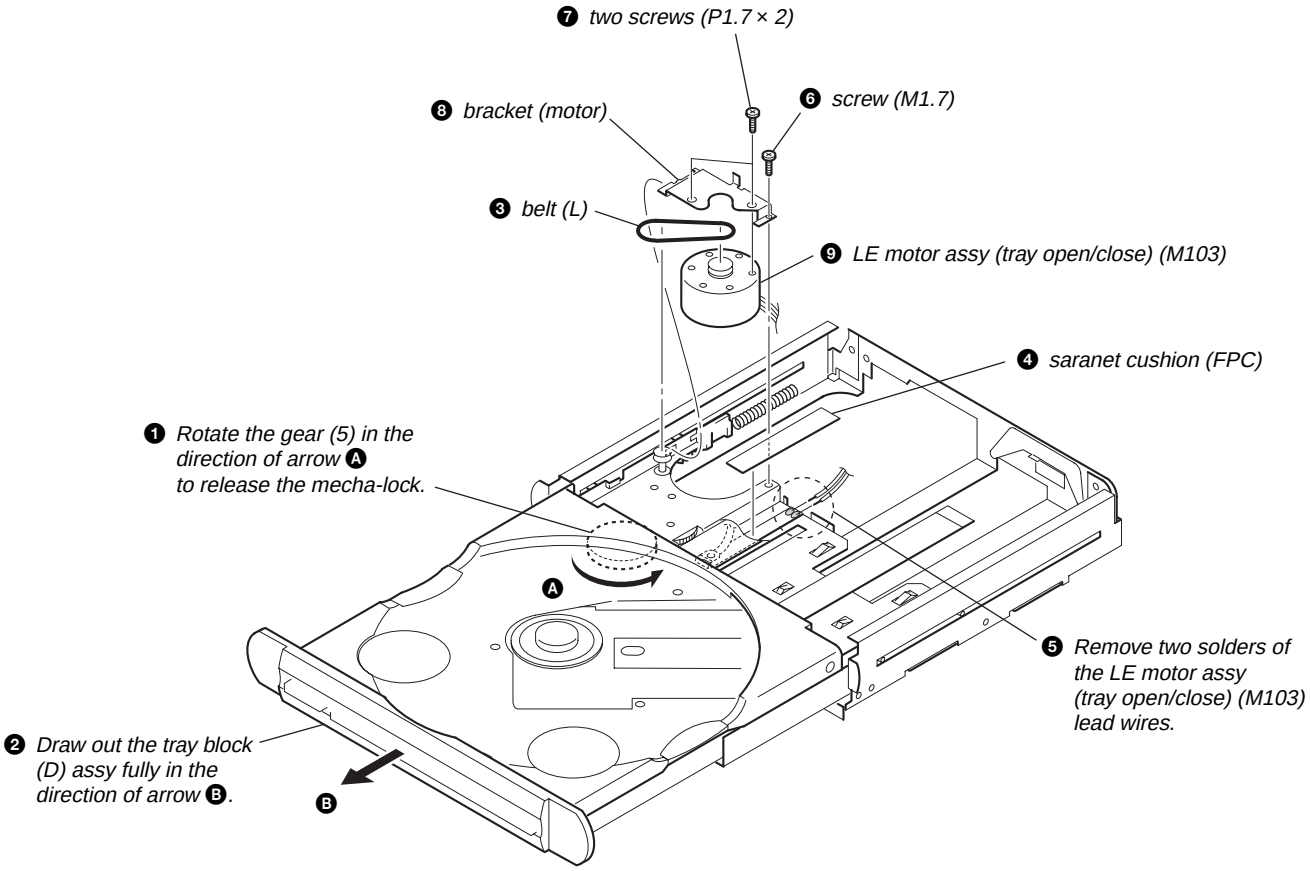
3-10. SUB BOARD



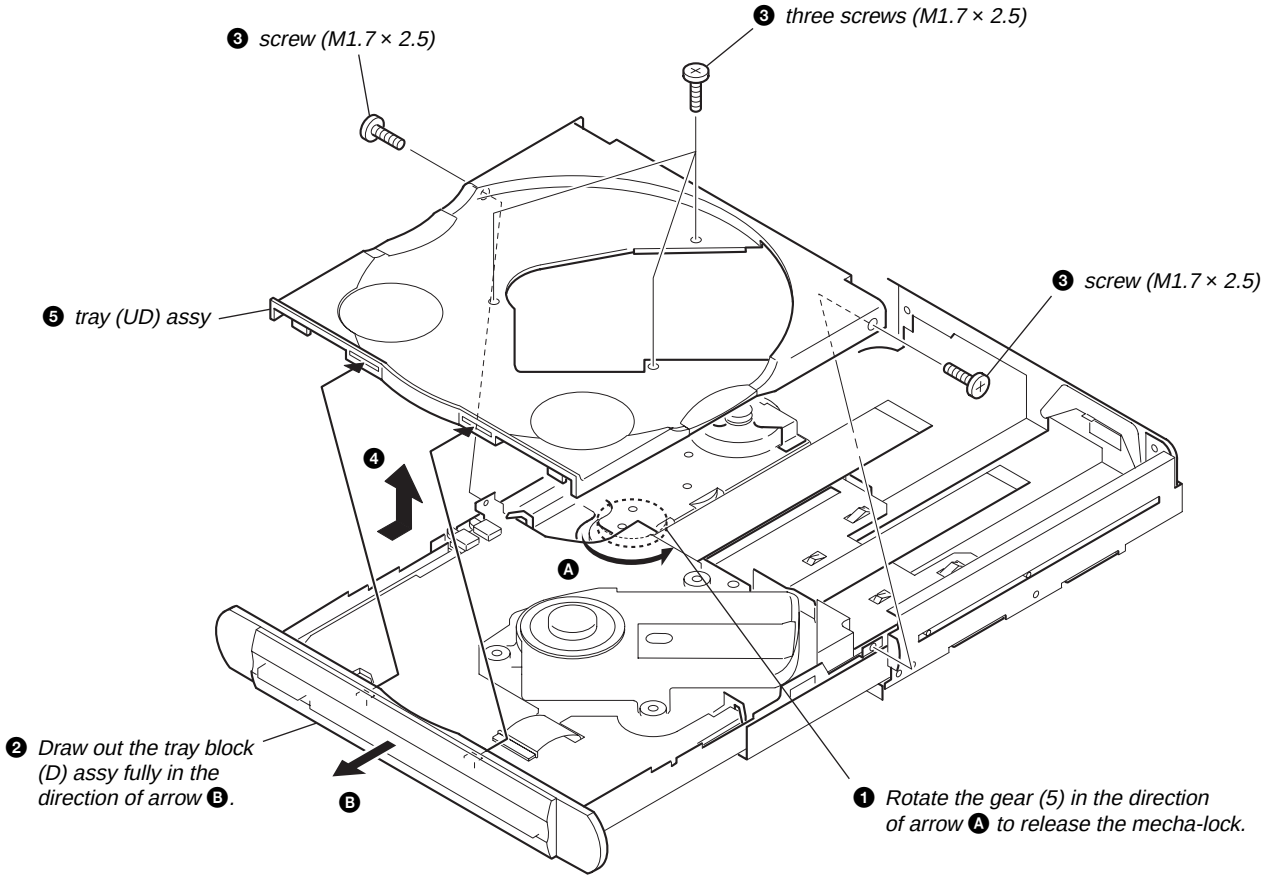
3-11. HEAT SINK, DC FAN (M501)


❺ screw (PTT2.6 × 6)
❷ screw (PTT2.6 × 8)
❼ connection cord (ANT)
❹ heat sink
❸ two screws (PTT2.6 × 16)
❶ screw (PTT2.6 × 6)
⓫ DC fan (M501)
❿ connector (CN528)
❾ connection cord (AUX) (AUX IN/SUB OUT)
❷ two screws (PTT2.6 × 8)
❻ terminal (J101)
❽ connector (CN301)

3-12. BELT (L), LE MOTOR ASSY (TRY OPEN/CLOSE) (M103)

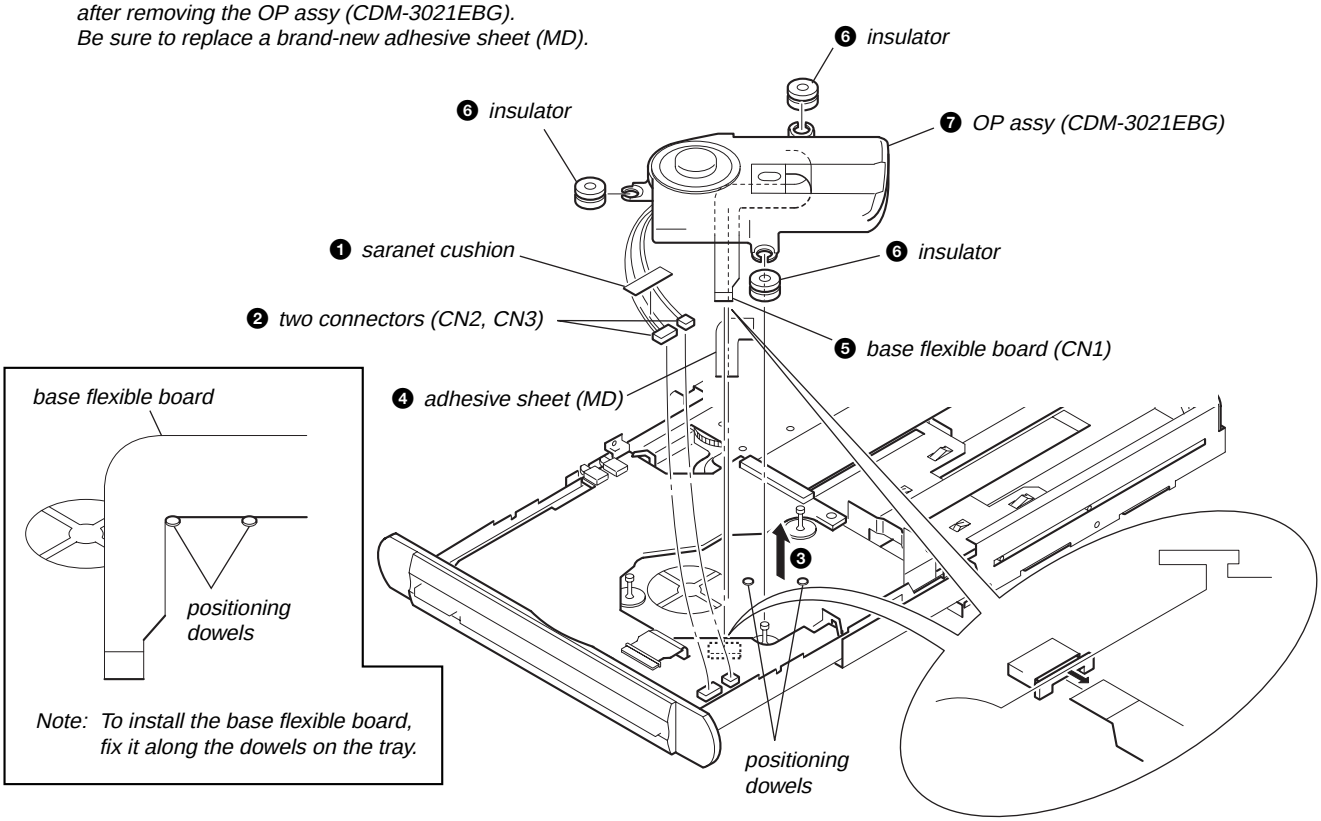

❼ two screws (P1.7 × 2)
❽ bracket (motor)
❻ screw (M1.7)
❸ belt (L)
❾ LE motor assy (tray open/close) (M103)
❹ saranet cushion (FPC)
❶ Rotate the gear (5) in the direction of arrow Ⓐ to release the mecha-lock.
Ⓐ
❺ Remove two solders of the LE motor assy (tray open/close) (M103) lead wires.
❷ Draw out the tray block (D) assy fully in the direction of arrow Ⓑ.
Ⓑ

3-13. TRAY (UD) ASSY

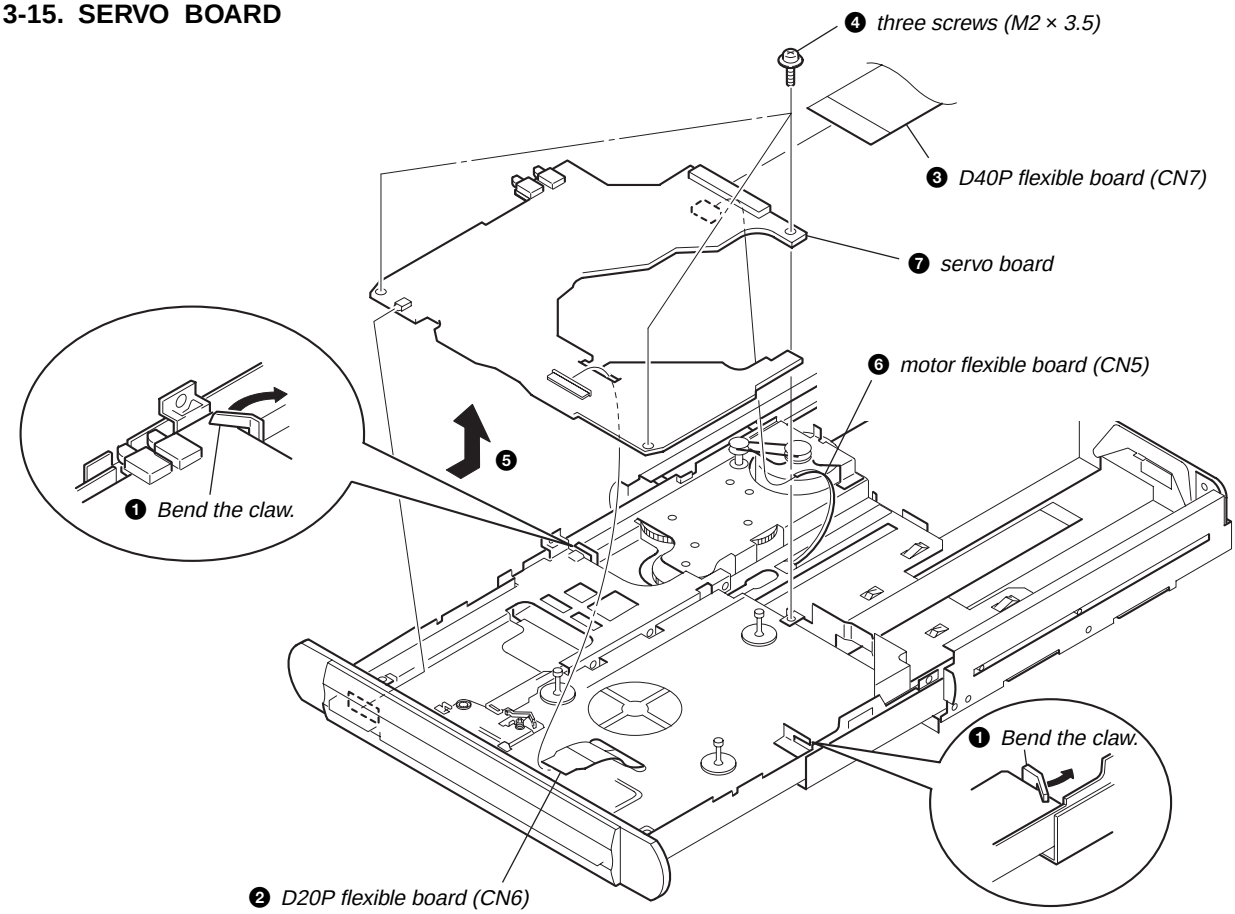

❸ screw (M1.7 × 2.5)
❸ three screws (M1.7 × 2.5)
❸ screw (M1.7 × 2.5)
❺ tray (UD) assy
❹
Ⓐ
❷ Draw out the tray block (D) assy fully in the direction of arrow Ⓑ.
Ⓑ
❶ Rotate the gear (5) in the direction of arrow Ⓐ to release the mecha-lock.

3-14. OP ASSY (CDM-3021EBG)

Note: Do not reuse the adhesive sheet (MD) after removing the OP assy (CDM-3021EBG). Be sure to replace a brand-new adhesive sheet (MD).



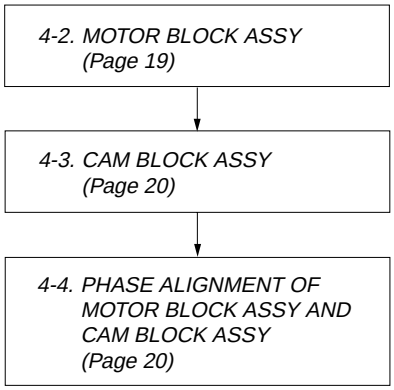
3-15. SERVO BOARD


❹ three screws (M2 × 3.5)
❸ D40P flexible board (CN7)
❼ servo board
❻ motor flexible board (CN5)
❺
❶ Bend the claw.
❶ Bend the claw.
❷ D20P flexible board (CN6)

SECTION 4
ASSEMBLY

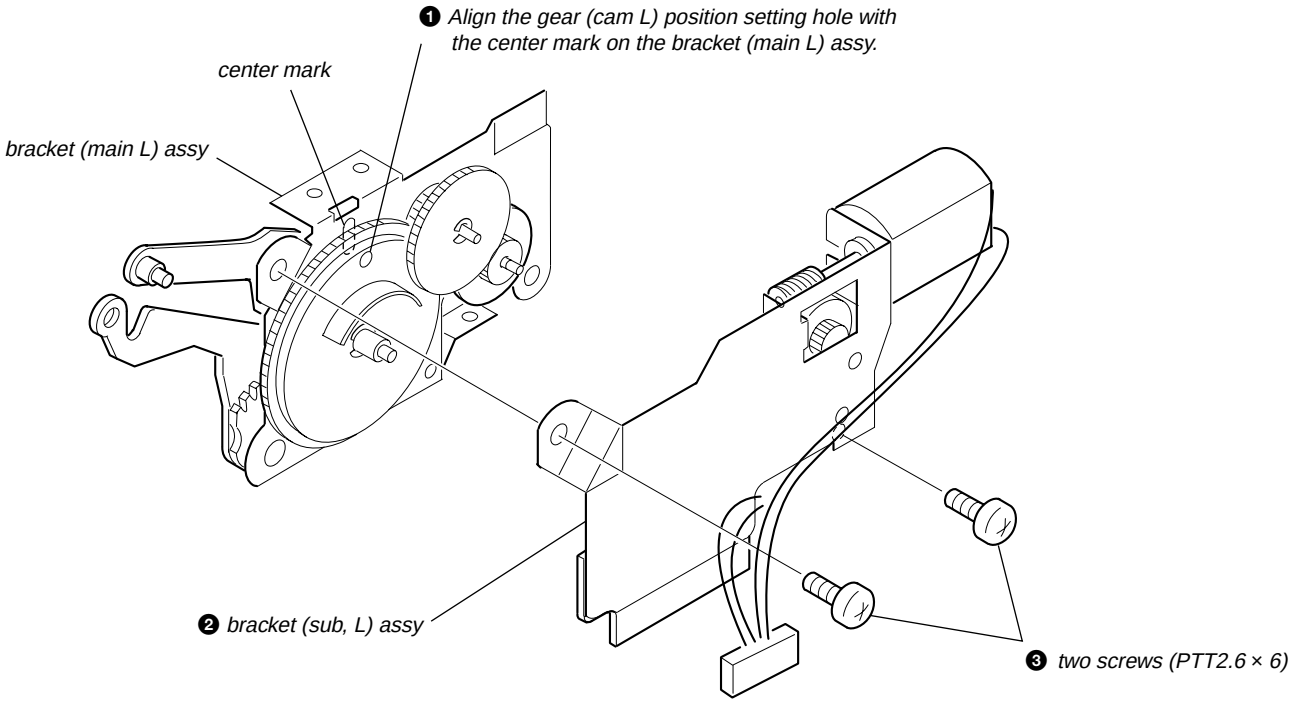
4-1. ASSEMBLY FLOW

• This set can be assembled in the order shown below.

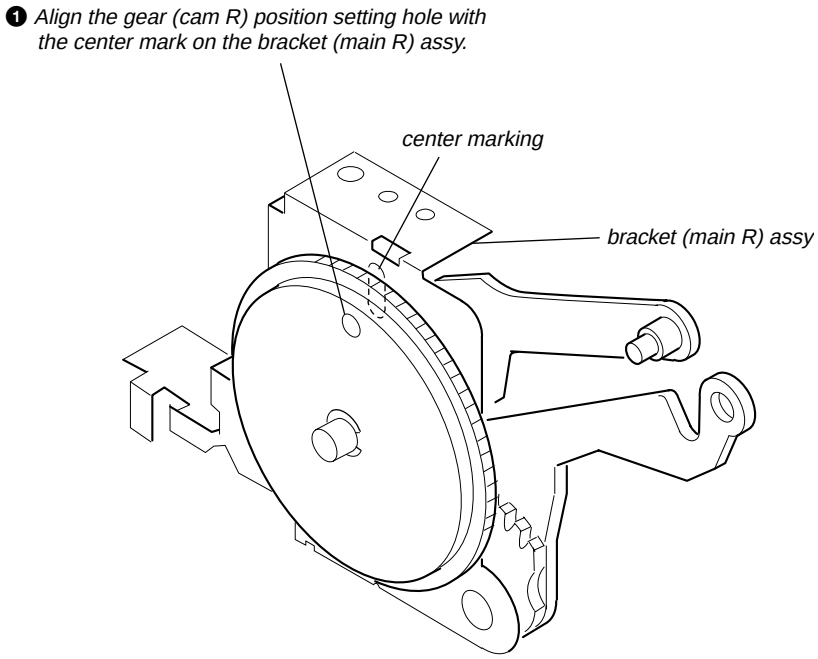


Note: Follow the assembly procedure in the numerical order given.

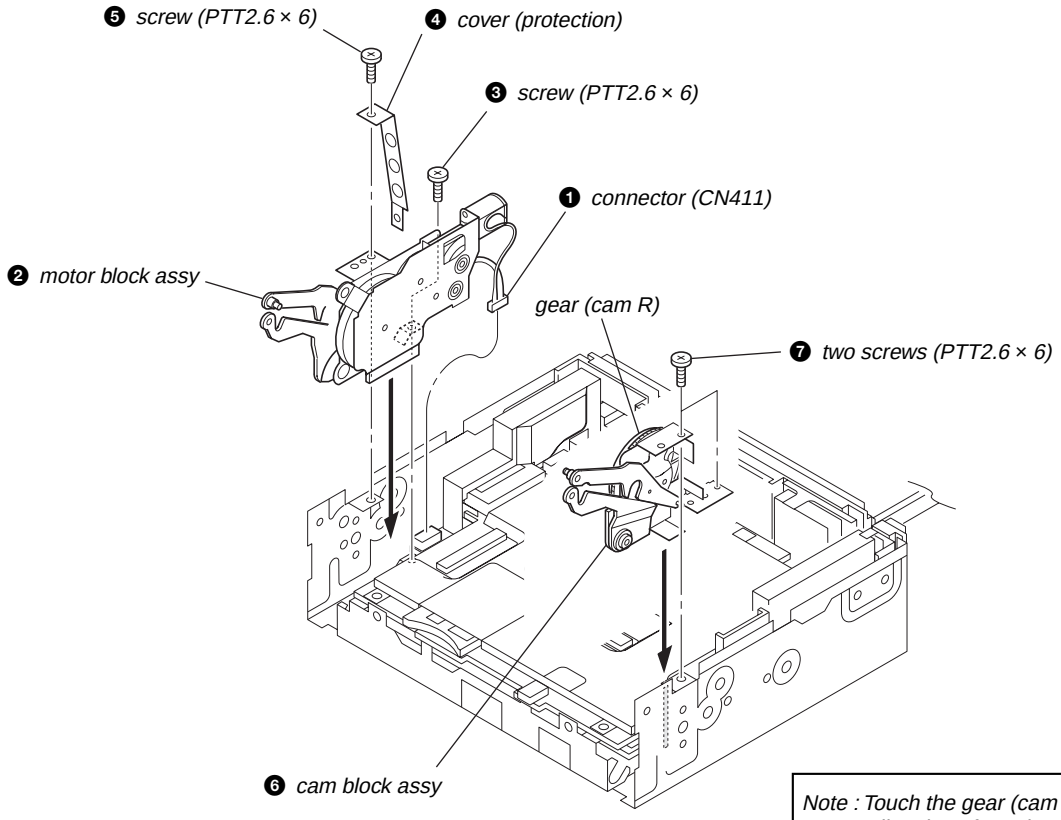
4-2. MOTOR BLOCK ASSY


❶ Align the gear (cam L) position setting hole with the center mark on the bracket (main L) assy.
center mark
bracket (main L) assy
❷ bracket (sub, L) assy
❸ two screws (PTT2.6 × 6)

4-3. CAM BLOCK ASSY


❶ Align the gear (cam R) position setting hole with the center mark on the bracket (main R) assy.
center marking
bracket (main R) assy

4-4. PHASE ALIGNMENT OF MOTOR BLOCK ASSY AND CAM BLOCK ASSY


❺ screw (PTT2.6 × 6)
❹ cover (protection)
❸ screw (PTT2.6 × 6)
❶ connector (CN411)
❷ motor block assy
gear (cam R)
❼ two screws (PTT2.6 × 6)
❻ cam block assy

Note : Touch the gear (cam R) with fingers in the direction of rotation and make sure that there is no phase difference with the motor block assy side position setting hole.

SECTION 5
TEST MODE

Note: The test mode of this set contains the items not used for the service. If you activated another mode by mistake, press the function button 1 or the [M] (Menu) button to deactivate that mode. Particularly, for the menu commands and Factory Setting saved in the HDD menu, never execute them except when the hard disk drive was replaced. Otherwise, the hard disk drive will not operate or the data saved by the user in the hard disk will be erased.

[ENTERING THE TEST MODE]

1. In the standby state, perform the following operation.
   (1) Rotate clockwise the right jog dial (PUSH LIST) 4 clicks.
   (2) Press the left jog button (PUSH SOUND).
   (3) Rotate counterclockwise the right jog dial (PUSH LIST) 5 clicks.
   (4) Press the left jog button (PUSH SOUND).
   (5) Rotate clockwise the right jog dial (PUSH LIST) 1 click.
   (6) Press the left jog button (PUSH SOUND) for more than 2 seconds.
2. When the test mode is activated, a peep will be heard and the "TEST MODE" will be displayed on the screen. ("TEST MODE" disappears soon)
3. Press the [M] (Menu) button, and the test mode main menu screen will be displayed.

[RELEASING THE TEST MODE]

To release the test mode, perform either of the following operations.

- Turn the main power off.
- Remove the front panel.
- Press the [OFF] button for more than 2 seconds.

Note: In exiting the test mode, the system is reset automatically and the data are erased. Then, when the power is turned on again, the initial setting (AM 9K/10K step choice, date and time setting) screen is displayed, but this setting is also erased in certain time after the main power was turned off.
Accordingly, re-setting is not necessary but normal operation and the test mode operation are disabled unless the initial setting has completed. In such a case, therefore, press the right jog button (PUSH LIST) repeatedly and enter tentative initial set values.

[BASIC OPERATION]

In the test mode, basically the following dial and buttons are used for the operation.

- Right jog dial (PUSH LIST) : Selects an item.
- Right jog button (PUSH LIST) : Enters the selected item.
- Function button 1 : Returns to the one-level higher menu

[DIAGNOSTIC FUNCTION]

Procedure:

1. Select the "Test Mode" from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
2. Rotate the right jog dial (PUSH LIST) to select the "DIAG", and press the right jog button (PUSH LIST) to enter the DIAG mode.
3. With the "ALL -Auto-" selected, pressing the right jog button (PUSH LIST) allows all of the following items to be checked automatically.
   - PEACOCK (MAIN board IC2003)
   - HUMMING BIRD (MAIN board IC3003)
   - ISP1161 (MAIN board IC4301)
   - CXD1859 (MAIN board IC4001)
   - E2PROM (MAIN board IC4002) *1
   - ATA0 (HDD) (Hard disk drive) *2
   - ATA1 (CDD) (CD servo block)
   - WM (USB connection) *3
   - RTC (SUB board IC502)

   *1) A checking without inserting a memory stick causes an error, and the "E2PROM NO MS" is displayed.
   *2) If the ATA0 (HDD) check results in NG, try to repeat the check several times.
   If repetitional check results in NG, a communication error is doubtful, besides faulty hard disk drive.
   *3) A checking without connecting the USB causes an error, and the "NWWM NG!" is displayed.
4. After automatic check of all items completed, if all items are OK, "OK ALL" will be displayed. In case of erroneous items, NG indication is given to respective erroneous items.
5. To return to the DIAG menu, press the left jog button (PUSH SOUND).

[VERSION DISPLAY]

Besides the version display for the users in normal mode, the version of each section of the system is displayed.

Procedure:

1. Select the "Test Mode" from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
2. Rotate the right jog dial (PUSH LIST) to select the "Version", and press the right jog button (PUSH LIST) to enter the Version mode.
3. With the "Version" mode activated, pressing the right jog button (PUSH LIST) allows the following versions to be displayed:
   - Main (version of main section)
   - Sub (version of sub section)
   - CD (version of CD servo section)

[Making CD-R For Service]

At the replacement of parts, this set may require jobs such as version updating of the main section and sub section and data installing to a HDD, and for these jobs, the CD-R for service is needed. Make the CD-R for service by downloading the data from the "ftp" server for service. The data to be downloaded are available with two types, for initial lot type and for upgraded type, and further as regards the upgraded type, the latest version at that time must be confirmed, thus requiring extreme care. (See table "The version of each section" on page 22)

Note on making CD-R: The file format should be ISSO9660.
Store all files in the ROOT directory.

[VERSION UP AFTER MICROCOMPUTER SOFTWARE RELATED PARTS REPLACEMENT]

If either of the following ICs was replaced with new one, the part supplied for repair contains old version programs, and thus the version of microcomputer software must be updated.

1) Main section (when IC1030 was replaced)*
   1-1. MAIN board replacement
   1-2. Flash memory (IC1030 on the MAIN board) replacement
2) Sub section (when IC501 was replaced)
   2-1. SUB board replacement
   2-2. Microcomputer (IC501 on the SUB board) replacement
3) CD servo section (when IC9 was replaced)
   3-1. SERVO board replacement
   3-2. Flash memory (IC9 on the SERVO board) replacement

*) If the flash memory (IC1030 on the MAIN board) or MAIN board was replaced, the work including the system ID setting is required, besides this work described here. For details, see "Relating with ID" in the next paragraph, after the completion of this work.

Procedure:

• Check the versions

1. After replacing the parts, turn the power on and enter the test mode. (Refer to page 21 "Entering The Test Mode")
2. Select the "Test Mode" from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the "Version", and press the right jog button (PUSH LIST) to enter the Version mode.
4. Rotate the right jog dial (PUSH LIST) to select the "Version", and press the right jog button (PUSH LIST) to display the version of each section (main, sub, CD servo)
5. Update the version in each section by referring to the operation for version up, if each version is not as listed below.

The version of each section:

Section	Initial Lot type	User Upgrade type
Main	1.00.05	2.03.0D *
Sub	1.00.02	1.00.0D *
CD servo	0.03.60	0.03.60 *

*) There are several kinds of versions in the upgraded type (CDDB compatible), and this table lists the latest version as of the end of May in 2003.
The latest version may be updated after this Service Manual was issued, and therefore make sure the latest version by referring to the Technical News issued at the version updating.

(1) Main Section

Note (for User Upgrade type only):
The version updating work must be performed without connecting the HDD, if only the flash memory (IC1030 on MAIN board) or the MAIN board is replaced without replacing the HDD at the same time. In this case, perform the version updating work with the flat cable between CN2001 on MAIN board and HDD disconnected, and after the version updating completed, reconnect it.

1. Chech the version of CD-R for service and insert the disc to the set.
2. Select the "Test Mode" from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the "Version", and press the right jog button (PUSH LIST) to enter the Version mode.
4. Rotate the right jog dial (PUSH LIST) to select the "Version Up", and press the right jog button (PUSH LIST) to enter the Version Up mode.
5. Rotate the right jog dial (PUSH LIST) to select the "Main", and press the right jog button (PUSH LIST) to display the present version information of main section.
6. Press the function button 1 ("UPDATE") to display confirmation screen of start the processing.
7. Rotate the right jog dial (PUSH LIST) to select the "OK", and press the right jog button (PUSH LIST) to start the processing.
   (process time: about 14 minutes)
8. Upon completion of the processing, the "Update is Finished" will be displayed.
9. The version displayed at this time is the one before version up, and therefore turn off the main power to exit the Test mode once, and then enter the Test mode again to check the version.
10. Perform the work including the ID setting by referring to "Relating with ID" in the next paragraph.

(2) Sub Section

1. Chech the version of CD-R for service and insert the disc to the set.
2. Select the "Test Mode" from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the "Version", and press the right jog button (PUSH LIST) to enter the Version mode.
4. Rotate the right jog dial (PUSH LIST) to select the "Super Version Up", and press the right jog button (PUSH LIST) to enter the Super Version Up mode.
5. Rotate the right jog dial (PUSH LIST) to select the "Sub", and press the right jog button (PUSH LIST) to display the present version information of sub section.
6. Press the function button 1 ("UPDATE") to display confirmation screen of start the processing.
7. Rotate the right jog dial (PUSH LIST) to select the "OK", and press the right jog button (PUSH LIST) to start the processing.
   (process time: about 4 minutes)
8. Upon completion of the processing, the "Update is Finished" will be displayed, and then will be release the test mode automatically.
9. Enter the test mode again, and check the version.

(3) CD Servo Section

Note: The version updating of the CD servo section is performed not from the CD-R but from the Memory Stick. Download the "CMX550D.MOT" from the "ftp" server for service and store it in the ROOT directory of the Memory Stick for use.

1. Insert the memory stick for service to the set.
2. Select the "Test Mode" from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the "Version", and press the right jog button (PUSH LIST) to enter the Version mode.
4. Rotate the right jog dial (PUSH LIST) to select the "Version Up", and press the right jog button (PUSH LIST) to enter the Version Up mode.
5. Rotate the right jog dial (PUSH LIST) to select the "CD Drive", and press the right jog button (PUSH LIST) to display the present version information of CD servo section.

6. Press the function button 1 (“UPDATE”) to display confirmation screen of start the processing.
7. Rotate the right jog dial (PUSH LIST) to select the “OK”, and press the right jog button (PUSH LIST) to start the processing.
   (process time: about 15 seconds)
8. Upon completion of the processing, the “Update is Finished” will be displayed.
9. The version displayed at this time is the one before version up, and therefore turn off the main power to exit the Test mode once, and then enter the Test mode again to check the version.

[RELATING WITH ID]

This set relates the main block (flash memory) and the HDD (hard disk drive) with a unique ID to protect the copyright.
If the MAIN board or flash memory (IC1030 on MAIN board) and HDD were replaced, the relationship between flash memory and HDD is lost, thus causing the HDD to fail. Therefore, the ID relational work is required.
Perform the work by proper methods, since the work required varies as follows depending on the parts to be replaced.

1) When the MAIN board or flash memory (IC1030 on the MAIN board) and HDD were replaced at the same time
2) When the only MAIN board or flash memory (IC1030 on the MAIN board) was replaced
3) When the only HDD was replaced

Note: The CD-R for service used when installing the data to the hard disk must have same version as that of the set. Before starting the work, be sure to check the version of the set and the CD-R for service. (See “Making CD-R for service” on page 21 and “Check the versions” on page 22)

1) When The MAIN Board or Flash Memory (IC1030 on The MAIN Board) and HDD Were Replaced at The Same Time

Note: Executing this operation without replacing the hard disk drive causes the user data to be erased. Accordingly, do not execute this operation by mistake.

When the MAIN board or flash memory (IC1030 on the MAIN board) and HDD were replaced at the same time, the processing such as system ID setting and formatting are required. After the MAIN board or flash memory (IC1030 on the MAIN board) and HDD replacement, be sure to execute all of the following steps.

1. MAIN board or flash memory (IC1030 on the MAIN board) and HDD replacement
   ↓
2. Version up of flash memory
   (Refer to page 22 “Version Up After Microcomputer Software Related Parts Replacement)
   ↓
3. The date and time setting
   ↓
4. HDD formatting
   ↓
5. ID creating and copy to the HDD
   ↓
6. Data installing to the HDD
   ↓
7. Operation check
   ↓
8. The Factory Setting

Procedure:

• The date and time setting

1. After replacing the parts and version up of flash memory, turn the power on and press the [M] (MENU) button.
2. The menu screen is displayed when the date and time setting screen is not displayed automatically, select the “Setup” and press the right jog button (PUSH LIST) to enter the Setup mode.
3. Set the present year, month, day, hour, minute in this order with the right jog dial and button (PUSH LIST), and finally press the right jog button (PUSH LIST), and the date and time display screen (standby screen) will appear, and thus the date and time setting is over.

   Right jog dial (PUSH LIST) : Change numeric value
   Right jog button (PUSH LIST) : Enter the set numeric value, and select next item or terminate the setting
   Function button 1 : Return to previous item

• HDD formatting

1. Enter the test mode. (Refer to page 21 “Entering The Test Mode”)
2. Select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the “HDD”, and press the right jog button (PUSH LIST) to enter the HDD mode.
4. Rotate the right jog dial (PUSH LIST) to select the “FORMAT”, and press the right jog button (PUSH LIST) to enter the FORMAT mode.
5. With the Format mode activated, press the right jog button (PUSH LIST), and the “HDD-FORMAT hddDbInit...” will be displayed and then the HDD formatting will start soon.
6. Upon successful completion of HDD formatting, “HDD-FORMAT OK” will be displayed. Then, press the right jog button (PUSH LIST) to return to the FORMAT menu, and further press the function button 1 to return to the HDD menu.

• ID creating and copy to the HDD

1. Select the “ID” from the HDD menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the ID mode.
2. Rotate the right jog dial (PUSH LIST) to select the “CREATE”, and press the right jog button (PUSH LIST) to enter the ID CREATE mode.
3. Rotate the right jog dial (PUSH LIST) to select the “(OK)”, and press the right jog button (PUSH LIST) to execute ID creating of the system ID.
4. Upon completion of ID creating, if the “ID-CREATE OK” or “ID-CREATE NG” is displayed. (Even if “NG” is displayed, there is no problem and proceed to the next step as it is)
5. Select the “COPY” from the ID menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the ID COPY mode.
6. Rotate the right jog dial (PUSH LIST) to select the “(OK)”, and press the right jog button (PUSH LIST) to execute ID copy to the HDD of the system ID.
7. Upon successful completion of ID copy, if the “ID-COPY OK” is displayed, release the test mode. (Power off)

• Data installing to the HDD

1. When the power is turned on, the initial setting screen is displayed. Press the right jog button (PUSH LIST) button repeatedly until tentative setting completed.
   Note: Exact date and time need not be set.
2. Chech the version of CD-R for service and insert the disc to the set.

3. Again in the test mode, select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST) and press the right jog button (PUSH LIST) to enter the Test Mode.
4. Rotate the right jog dial (PUSH LIST) to select the “INSTALL”, and press the right jog button (PUSH LIST) to enter the INSTALL mode.
5. Rotate the right jog dial (PUSH LIST) to select the “ALL(U)”, and press the right jog button (PUSH LIST), and the “INSTALL-ALL(U) “ will be displayed and the installation will start soon.
   (process time: about 10 seconds (Initial Lot type), about 30 minutes (User Upgrade type))
6. Upon successful completion of installation, the “INSTALL-ALL(U) OK” will be displayed, and then remove the CD-R for service and release the test mode. (Power off)

• Operation check

1. Turn the power on again, and the initial setting screen will be displayed. Then, press the right jog button (PUSH LIST) button repeatedly until tentative setting completed.
   Note: Exact date and time need not be set.
2. In the normal mode, insert a music CD and press the [SOURCE] button to play.
3. Press the [● REC] button, rotate the right jog dial (PUSH LIST) to select the third item (musical note mark), and press the right jog button (PUSH LIST).
4. Press the function button 2 (ALL) to cancel the selection of all tracks. (A check mark on the right side of track number will disappear)
5. With the track number 1 selected, press the right jog button (PUSH LIST). (A check mark will be displayed on the right side of track number 1 only)
6. Press the [● REC] button to start the recording.
7. Upon completion of the recording, a peep will be heard and the [● REC] button will change its color from red to blue.
8. Press the [SOURCE] button to start the play of HDD. Check that the HDD is played back normally.

• Factory Setting

Note: The “Factory Setting” command deletes the data recorded on the hard disk. Only if the hard disk drive was replaced, execute this command to erase the data for operation check before returning the set to the customer.

1. Remove the CD and press the [OFF] button to activate the standby state, and then enter the test mode.
2. Select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST) and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the “Factory Setting”, and press the right jog button (PUSH LIST) to start the processing.
4. Upon completion of all of the processing, “Factory Setting-OK” will be displayed, and then the system will be reset and will restart automatically.

2) When The Only MAIN Board or Flash Memory (IC1030 on The MAIN Board) Was Replaced

When the MAIN board or flash memory (IC1030 on the MAIN board) was replaced, the processing such as system ID setting is required. After the MAIN board or flash memory (IC1030 on the MAIN board) replacement, be sure to execute all of the following steps.

1. MAIN board or flash memory (IC1030 on the MAIN board) replacement
   ↓
2. Version up of flash memory *
   (Refer to page 22 “Version Up After Microcomputer Software Related Parts Replacement)
   ↓
3. The date and time setting
   ↓
4. ID creating and copy to the HDD
   ↓
5. Operation check

*** (for User Upgrade type only):**
The version updating work must be performed without connecting the HDD, if only the flash memory (IC1030 on MAIN board) or the MAIN board is replaced without replacing the HDD at the same time. In this case, perform the version updating work with the flat cable between CN2001 on MAIN board and HDD disconnected, and after the version updating completed, reconnect it.

Procedure:

• The date and time setting

1. After replacing the parts and version up of flash memory, turn the power on and press the [M] (MENU) button.
2. The menu screen is displayed when the date and time setting screen is not displayed automatically, select the “Setup” and press the right jog button (PUSH LIST) to enter the Setup mode.
3. Set the year, month, day, hour, minute in this order with the right jog dial and button (PUSH LIST), and finally press the right jog button (PUSH LIST), and the date and time display screen (standby screen) will appear, and thus the date and time setting is over.
   Right jog dial (PUSH LIST) : Change numeric value
   Right jog button (PUSH LIST) : Enter the set numeric value, and select next item or terminate the setting
   Function button 1 : Return to previous item

• ID creating and copy to the HDD

1. Enter the test mode. (Refer to page 21 “Entering The Test Mode”)
2. Select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the “HDD”, and press the right jog button (PUSH LIST) to enter the HDD mode.
4. Rotate the right jog dial (PUSH LIST) to select the “ID”, and press the right jog button (PUSH LIST) to enter the ID mode.
5. Rotate the right jog dial (PUSH LIST) to select the “CREATE”, and press the right jog button (PUSH LIST) to enter the ID CREATE mode.
6. Rotate the right jog dial (PUSH LIST) to select the “(OK)”, and press the right jog button (PUSH LIST) to execute ID creating of the system ID.
7. Upon completion of ID creating, if the “ID-CREATE OK” or “ID-CREATE NG” is displayed. (Even if “NG” is displayed, there is no problem and proceed to the next step as it is)
8. Select the “COPY” from the ID menu by rotating the right jog

dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the ID COPY mode.
9. Input the password for ID copy with the right jog dial and button (PUSH LIST).
10. Rotate the right jog dial (PUSH LIST) to select the "(OK)", and press the right jog button (PUSH LIST) to execute ID copy to the HDD of the system ID.
11. Upon successful completion of ID copy, if the "ID-COPY OK" is displayed, release the test mode. (Power off)

• Data installing to the HDD (User Upgrade type only)

Note 1: This operation is required for the User Upgrade type only. For Initial Lot type, skip this operation and go to the next step "Operation check".

Note 2: Data installing may fail, if there is less available space in the hard disk.
If data installing failed, make a checking through the following procedure. Less space remains if "FULL CAPACITY" is displayed.
Checking procedure:
(1) In the standby state with normal mode, press the [M] (MENU) button to display the menu screen.
(2) Rotate the right jog dial (PUSH LIST) to select the "Library", and press the right jog button (PUSH LIST) to enter the Library mode.
(3) Rotate the right jog dial (PUSH LIST) to select the "CDDB Install", and press the right jog button (PUSH LIST) and display confirmation screen of start the processing.
(4) Rotate the right jog dial (PUSH LIST) to select the "OK", and press the right jog button (PUSH LIST). Less space remains if "FULL CAPACITY" is displayed.

1. When the power is turned on, the initial setting screen is displayed. Press the right jog button (PUSH LIST) button repeatedly until tentative setting completed.
Note: Exact date and time need not be set.
2. Chech the version of CD-R for service and insert the disc to the set.
3. Again in the test mode, select the "Test Mode" from the test mode main menu by rotating the right jog dial (PUSH LIST) and press the right jog button (PUSH LIST) to enter the Test Mode.
4. Rotate the right jog dial (PUSH LIST) to select the "INSTALL", and press the right jog button (PUSH LIST) to enter the INSTALL mode.
5. Rotate the right jog dial (PUSH LIST) to select the "ALL(U)", and press the right jog button (PUSH LIST), and the "INSTALL-ALL(U) " will be displayed and the installation will start soon.
(process time: about 30 minutes)
6. Upon successful completion of installation, the "INSTALL-ALL(U) OK" will be displayed, and then remove the CD-R for service and release the test mode. (Power off)

• Operation check

1. Turn the power on again, and the initial setting screen will be displayed. Then, press the right jog button (PUSH LIST) button repeatedly until tentative setting completed.
Note: Exact date and time need not be set.
2. In the normal mode, press the [SOURCE] button to select the HDD mode and play recorded contents. Check that the recorded contents are played back normally.
3. Insert a music CD and press the [SOURCE] button to play.
4. Press the [● REC] button, rotate the right jog dial (PUSH LIST) to select the third item (musical note mark), and press the right jog button (PUSH LIST).
5. Press the function button 2 (ALL) to cancel the selection of all tracks. (A check mark on the right side of track number will disappear)
6. With the track number 1 selected, press the right jog button (PUSH LIST). (A check mark will be displayed on the right side of track number 1 only)
7. Press the [● REC] button to start the recording.
8. Check that the progress bar is processing and remaining amount of time for recording indicated next to the bar is decreasing.
9. Press the function 1 (□) button to quit recording.

3) When The Only HDD Was Replaced

Note: Executing this operation without replacing the hard disk drive causes the user data to be erased. Accordingly, do not execute this operation by mistake.

When the hard disk drive (HDD) was replaced, the processing such as formatting is required. After the HDD replacement, be sure to execute all of the following steps.

1. HDD replacement
↓
2. HDD formatting
↓
3. ID copy to the HDD
↓
4. Data installing to the HDD
↓
5. Operation check
↓
6. The Factory Setting

Procedure:

• HDD formatting

1. After replacing the HDD, turn the power on and enter the test mode. (Refer to page 21 “Entering The Test Mode”)
2. Select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the “HDD”, and press the right jog button (PUSH LIST) to enter the HDD mode.
4. Rotate the right jog dial (PUSH LIST) to select the “FORMAT”, and press the right jog button (PUSH LIST) to enter the FORMAT mode.
5. With the Format mode activated, press the right jog button (PUSH LIST), and the “HDD-FORMAT hddDbInit...” will be displayed and then the HDD formatting will start soon.
6. Upon successful completion of HDD formatting, “HDD-FORMAT OK” will be displayed. Then, press the right jog button (PUSH LIST) to return to the FORMAT menu, and further press the function button 1 to return to the HDD menu.

• ID copy to the HDD

1. Select the “ID” from the HDD menu by rotating the right jog dial (PUSH LIST), and press the right jog button (PUSH LIST) to enter the ID mode.
2. Rotate the right jog dial (PUSH LIST) to select the “COPY”, and press the right jog button (PUSH LIST) to enter the ID COPY mode.
3. Rotate the right jog dial (PUSH LIST) to select the “(OK)”, and press the right jog button (PUSH LIST) to execute ID copy to the HDD of the system ID.
4. Upon successful completion of ID copy, if the “ID-COPY OK” is displayed, release the test mode. (Power off)

• Data installing to the HDD

1. When the power is turned on, the initial setting screen is displayed. Press the right jog button (PUSH LIST) button repeatedly until tentative setting completed.
   Note: Exact date and time need not be set.
2. Chech the version of CD-R for service and insert the disc to the set.
3. Again in the test mode, select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST) and press the right jog button (PUSH LIST) to enter the Test Mode.
4. Rotate the right jog dial (PUSH LIST) to select the “INSTALL”, and press the right jog button (PUSH LIST) to enter the INSTALL mode.
5. Rotate the right jog dial (PUSH LIST) to select the “ALL(U)”, and press the right jog button (PUSH LIST), and the “INSTALL-ALL(U)” will be displayed and the installation will start soon.
   (process time: about 10 seconds (Initial Lot type), about 30 minutes (User Upgrade type))
6. Upon successful completion of installation, the “INSTALL-ALL(U) OK” will be displayed, and then remove the CD-R for service and exit the test mode. (Power off)

• Operation check

1. Turn the power on again, and the initial setting screen will be displayed. Then, press the right jog button (PUSH LIST) button repeatedly until tentative setting completed.
   Note: Exact date and time need not be set.
2. Insert a music CD and press the [SOURCE] button to play.
3. Press the [● REC] button, rotate the right jog dial (PUSH LIST) to select the third item (musical note mark), and press the right jog button (PUSH LIST).
4. Press the function button 2 (ALL) to cancel the selection of all tracks. (A check mark on the right side of track number will disappear)
5. With the track number 1 selected, press the right jog button (PUSH LIST). (A check mark will be displayed on the right side of track number 1 only)
6. Press the [● REC] button to start the recording.
7. Upon completion of the recording, a peep will be heard and the [● REC] button will change its color from red to blue.
8. Press the [SOURCE] button to start the play of HDD. Check that the HDD is played back normally.

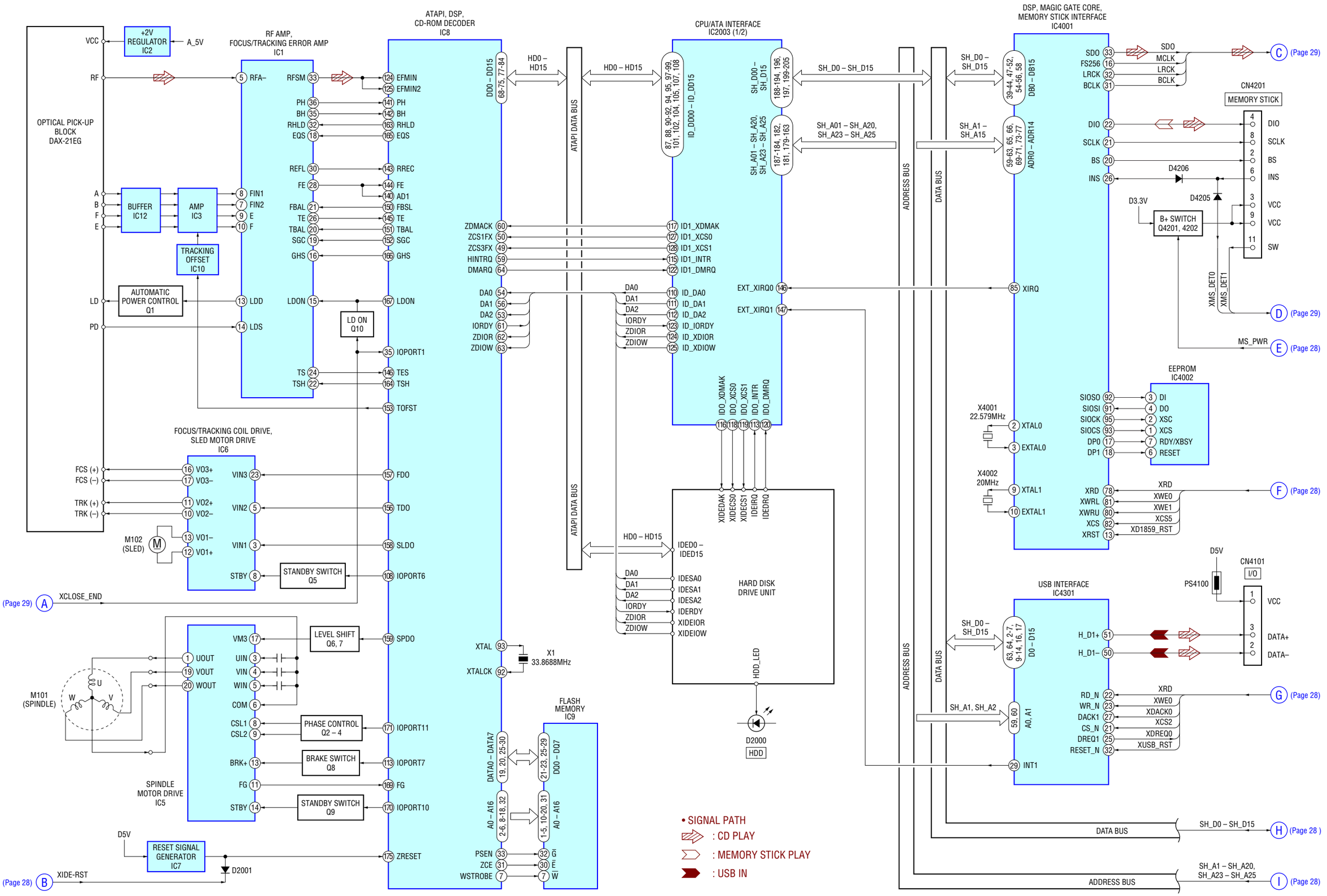
• Factory Setting

Note: The “Factory Setting” command deletes the data recorded on the hard disk. Only if the hard disk drive was replaced, execute this command to erase the data for operation check before returning the set to the customer.

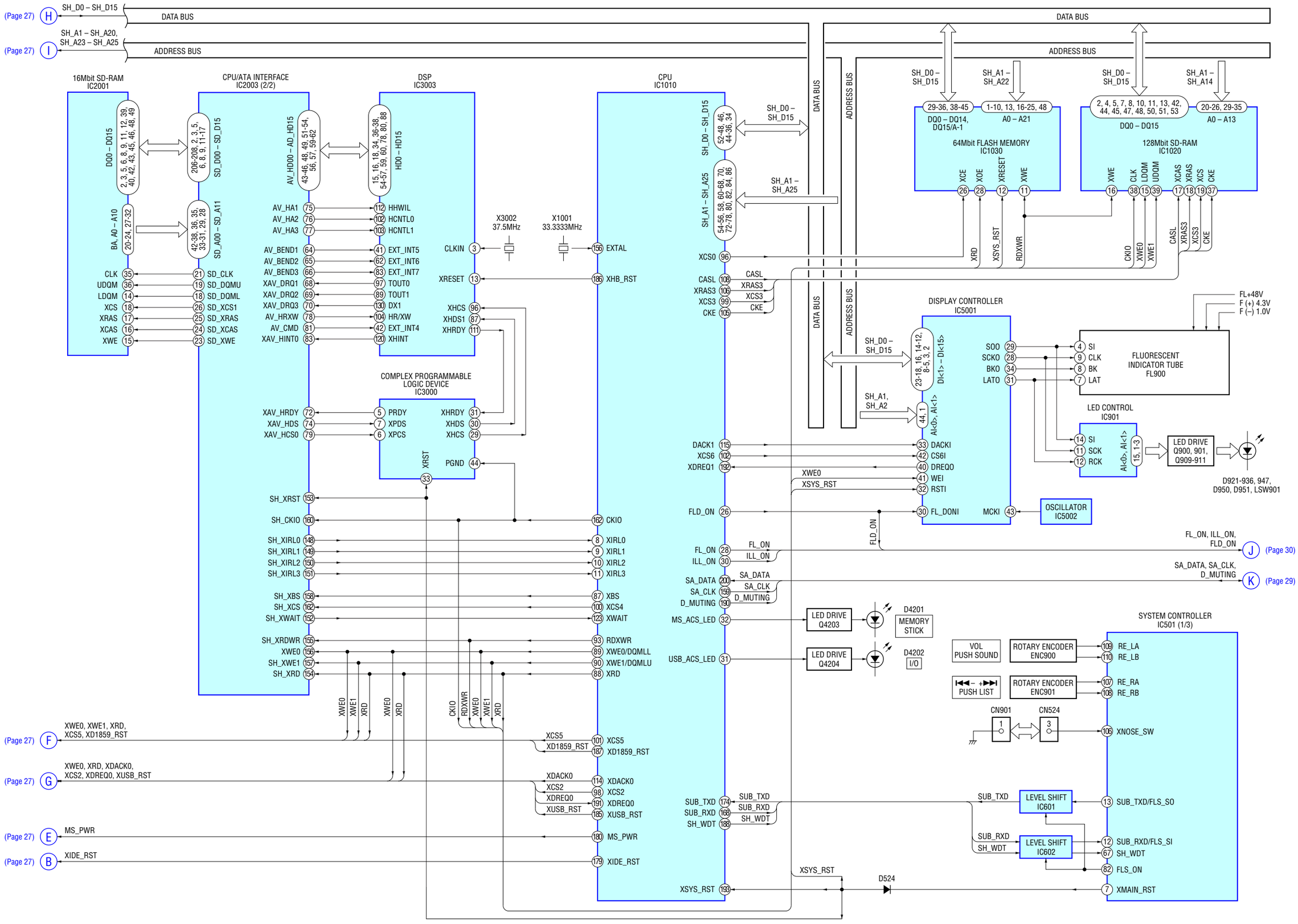
1. Remove the CD and press the [OFF] button to activate the standby state, and then enter the test mode.
2. Select the “Test Mode” from the test mode main menu by rotating the right jog dial (PUSH LIST) and press the right jog button (PUSH LIST) to enter the Test Mode.
3. Rotate the right jog dial (PUSH LIST) to select the “Factory Setting”, and press the right jog button (PUSH LIST) to start the processing.
4. Upon completion of all of the processing, “Factory Setting-OK” will be displayed, and then the system will be reset and will restart automatically.

SECTION 6
DIAGRAMS

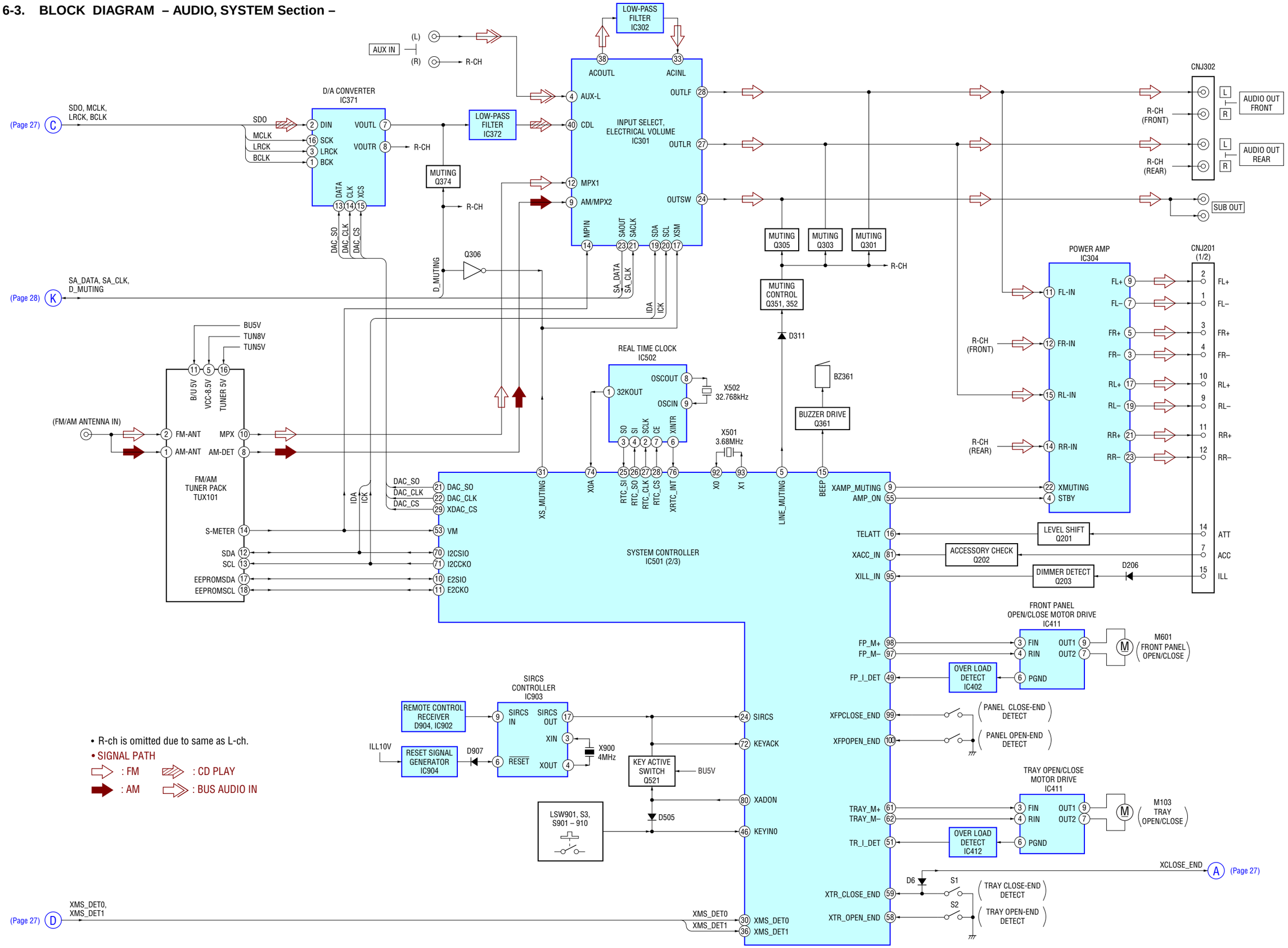
6-1. BLOCK DIAGRAM – SERVO, HD/MS/USB INTERFACE Section –



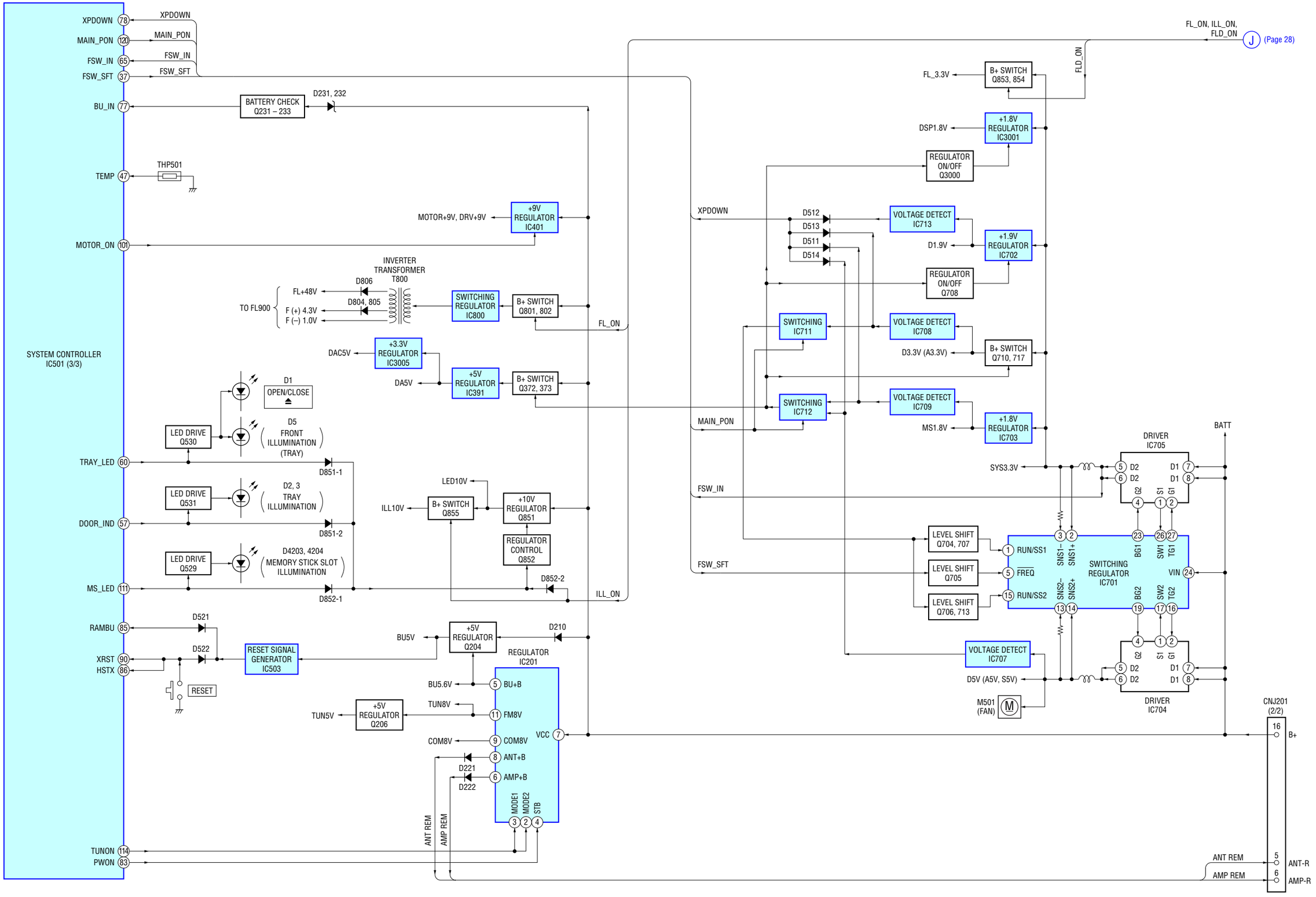
6-2. BLOCK DIAGRAM – CPU, DISPLAY Section –



6-3. BLOCK DIAGRAM – AUDIO, SYSTEM Section –



6-4. BLOCK DIAGRAM – POWER SUPPLY Section –



6-5. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : CD PLAY
  ( ) : HD
  ⟨⟨ ⟩⟩ : FM
  [ ] : AM
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM
  Σ : MEMORY STICK PLAY
  ➡ : USB IN
  ⇨ : CD

Note on Printed Wiring Boards:

- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

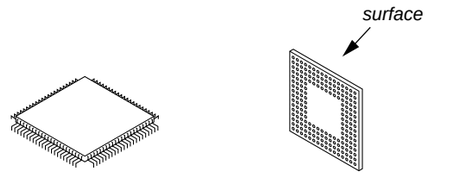
Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

- SERVO board, MAIN board, SUB board and POWER board are multi-layer printed boards.
  However, the patterns of intermediate-layer have not been included in these diagrams.

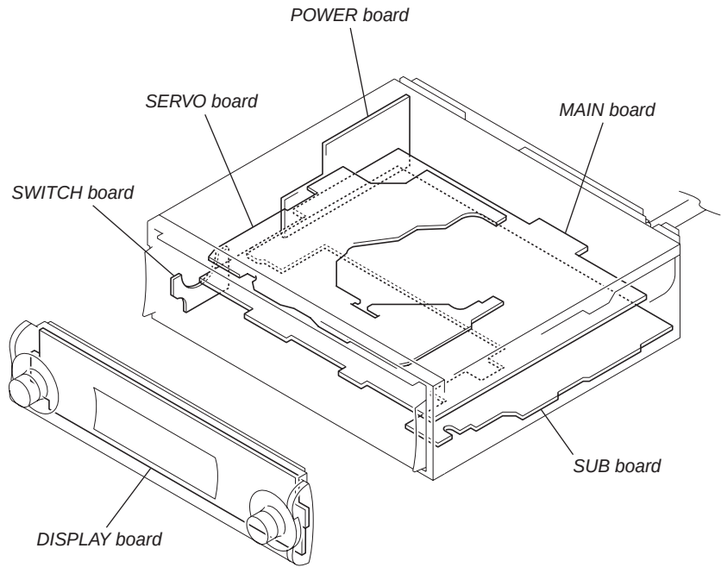
* Replacement of IC3003 and IC4001 used in this set requires a special tool.

- Lead Layouts



Lead layout of conventional IC CSP (chip size package)

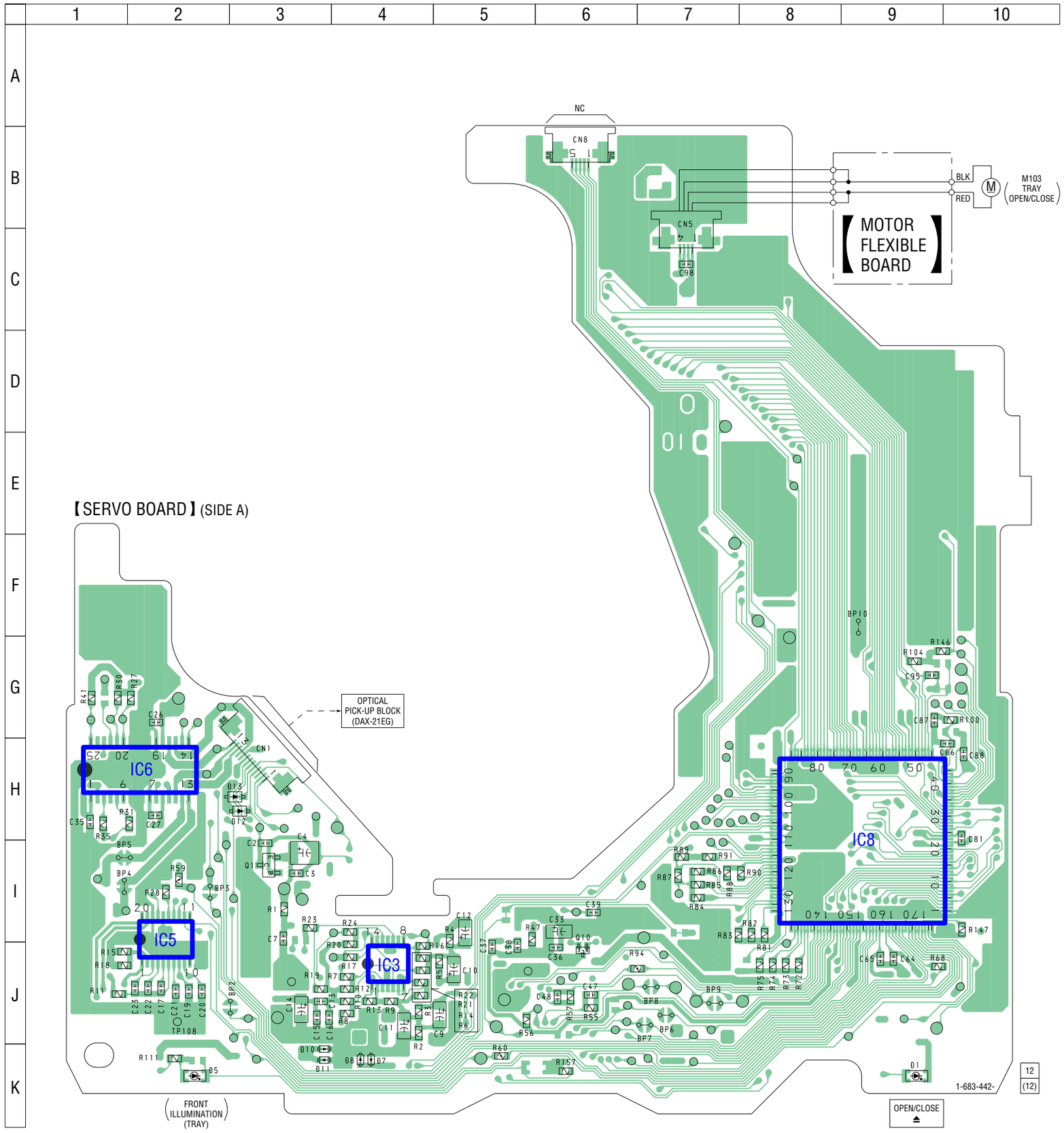
• Circuit Boards Location



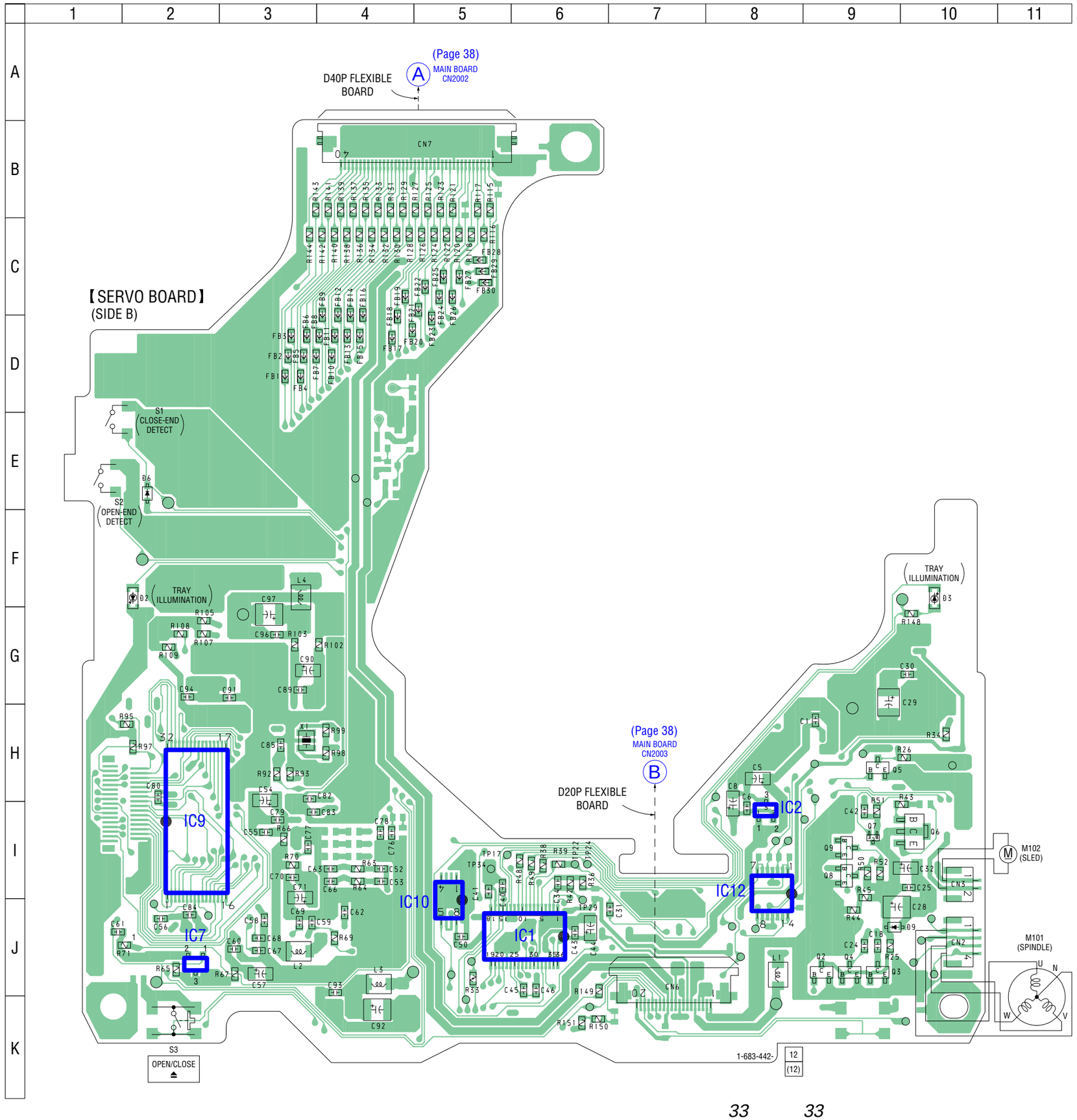
6-6. PRINTED WIRING BOARD – SERVO Board (Side A) – • See page 31 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D1	K-9
D5	K-2
D7	K-4
D8	K-4
D10	K-3
D11	K-3
D12	H-3
D13	H-3
IC3	J-4
IC5	I-2
IC6	H-2
IC8	H-9
Q1	I-3
Q10	J-6



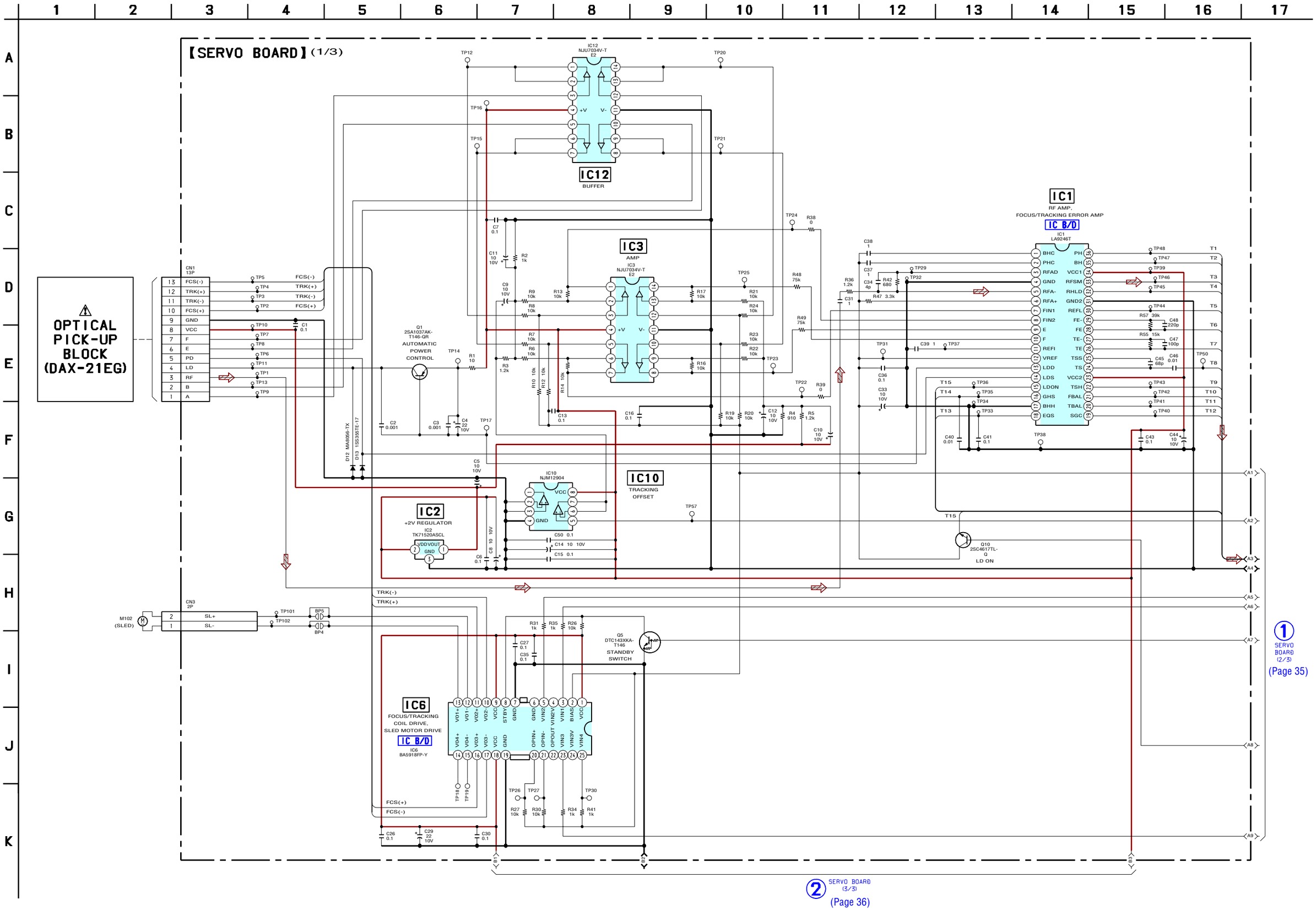
6-7. PRINTED WIRING BOARD – SERVO Board (Side B) – • See page 31 for Circuit Boards Location.



- **Semiconductor Location**

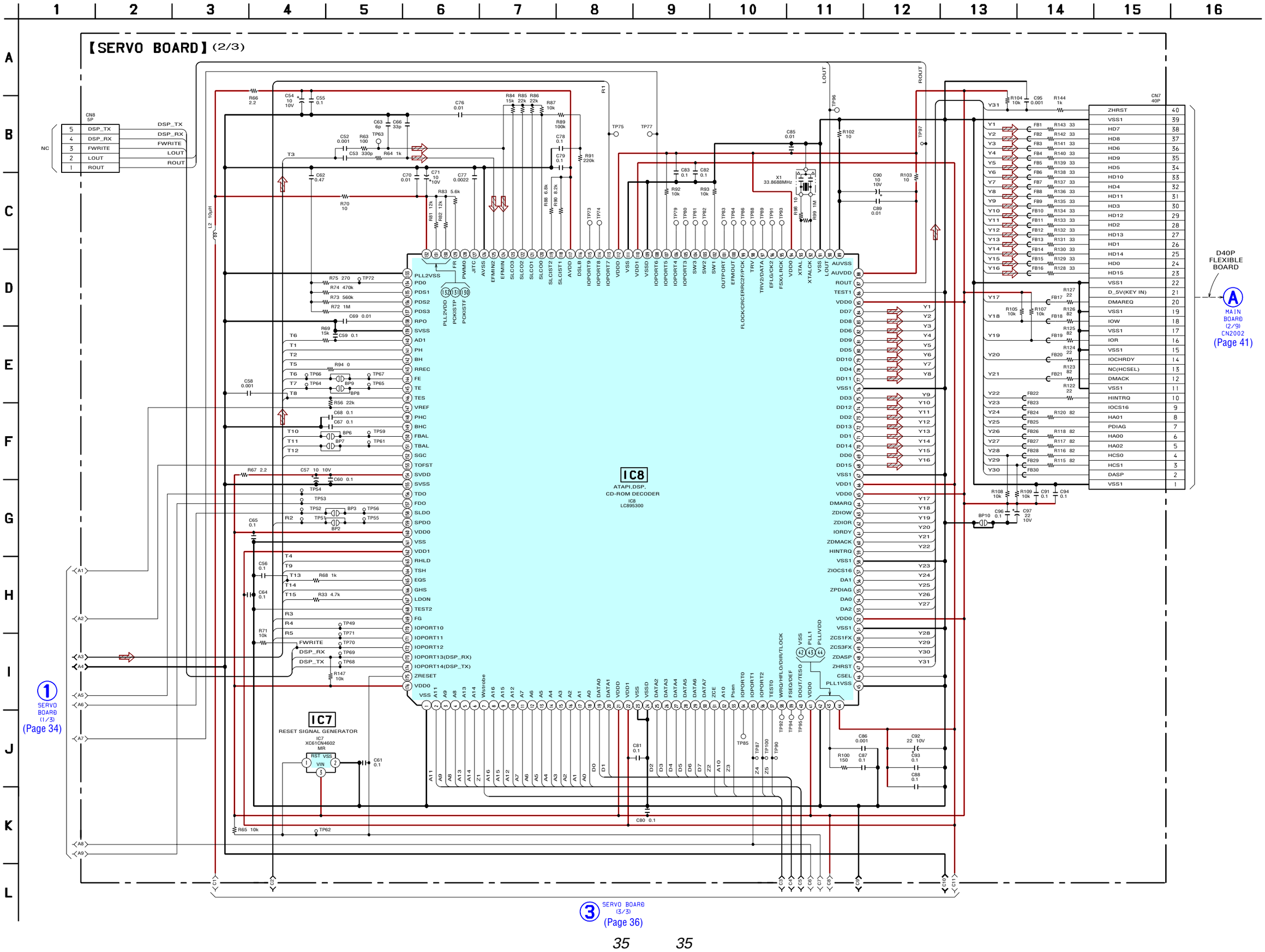
Ref. No.	Location
D2	F-2
D3	F-10
D6	E-2
D9	J-9
IC1	J-6
IC2	I-8
IC7	J-2
IC9	I-2
IC10	J-5
IC12	I-8
Q2	J-9
Q3	J-9
Q4	J-9
Q5	H-9
Q6	I-10
Q7	I-9
Q8	I-9
Q9	I-9

6-8. SCHEMATIC DIAGRAM – SERVO Board (1/3) – • See page 60 for IC Block Diagrams.



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-9. SCHEMATIC DIAGRAM – SERVO Board (2/3) –



6-10. SCHEMATIC DIAGRAM – SERVO Board (3/3) – • See page 60 for IC Block Diagrams.

【SERVO BOARD】(3/3)

③ SERVO BOARD (2/3) (Page 35)

② SERVO BOARD (1/3) (Page 34)

D20P FLEXIBLE BOARD

Ⓑ MAIN BOARD (2/9) CN2003 (Page 41)

【MOTOR FLEXIBLE BOARD】

CN6 20P

SGND	1
SGND	2
S5V	3
S5V	4
A5V	5
AGND	6
A3.3V	7
D3.3V	8
DGND	9
D5V	10
MOTOR+	11
MOTOR-	12
CLOSE_END	13
XIDE_RST	14
OPEN_END	15
EJECT_KEY	16
TRAY_LED	17
EJECT_LED	18
MOTOR+	19
NC	20

CN2 4P

4	W
3	V
2	U
1	COMMON

M101 (SPINDLE)

IC5 SPINDLE MOTOR DRIVE IC B/D

IC5 BD6609FV

IC9 FLASH MEMORY IC B/D

IC9 NX29F010-70-550D 02

CN5 4P

M103 TRAY OPEN/CLOSE

D2,3 TRAY ILLUMINATION

D5 FRONT ILLUMINATION (TRAY)

S1 CLOSE-END DETECT

S2 OPEN-END DETECT

S3 OPEN/CLOSE

Q2-4 PHASE CONTROL

Q6,7 LEVEL SHIFT

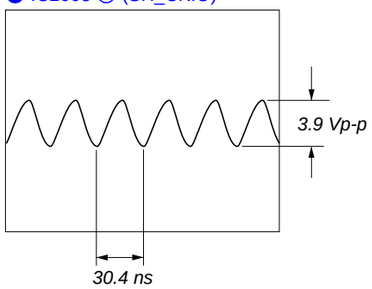
Q8 BRAKE SWITCH

Q9 STANDBY SWITCH

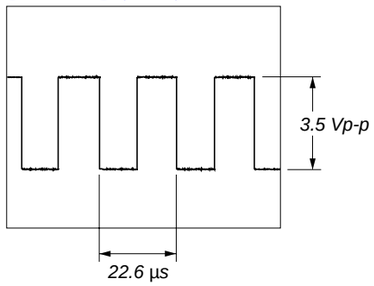
• **Waveforms**

– MAIN Board –

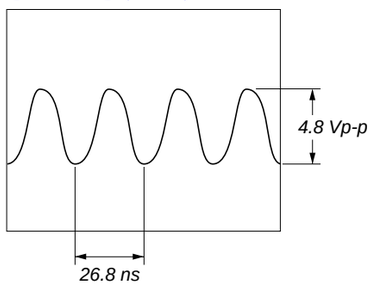
❶ IC2003 ⑯ (SH_CKIO)



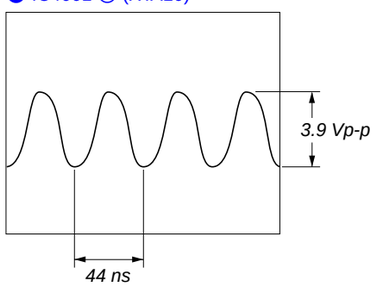
❼ IC4001 ㉜ (LRCK)



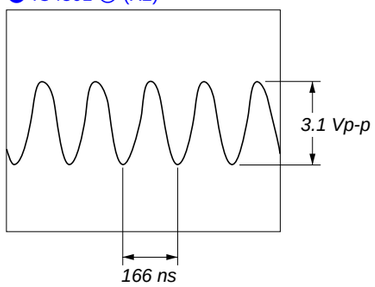
⓬ IC3003 ③ (CLKIN)



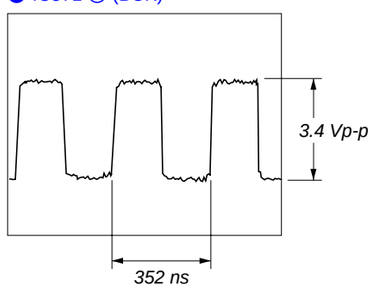
❸ IC4001 ② (XTAL0)



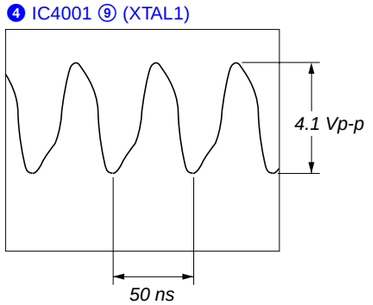
❽ IC4301 ㊹ (X2)



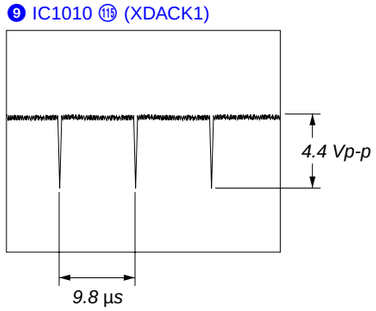
⓭ IC371 ① (BCK)



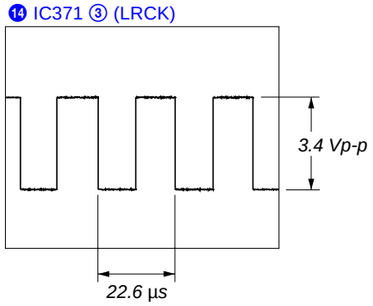
❹ IC4001 ⑨ (XTAL1)



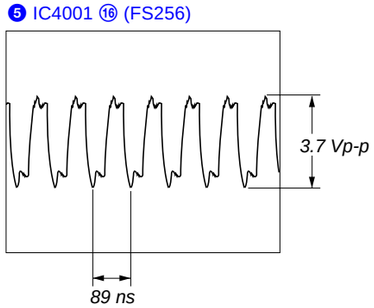
❾ IC1010 ⑪⑨ (XDACK1)



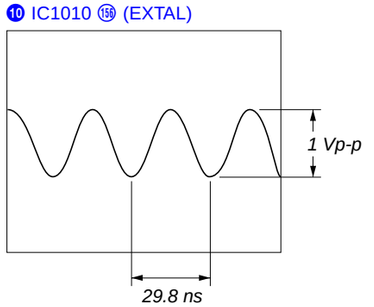
⓮ IC371 ③ (LRCK)



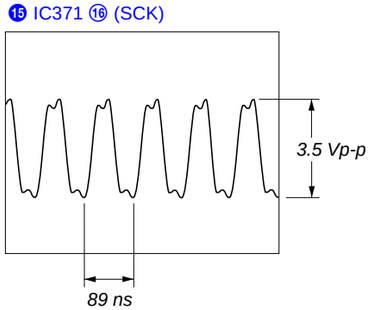
❺ IC4001 ⑯ (FS256)



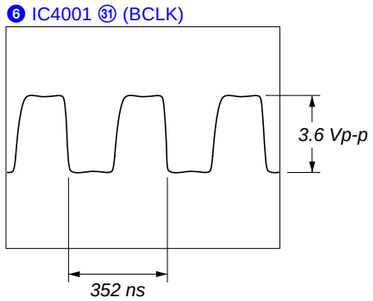
❿ IC1010 ⑮⑧ (EXTAL)



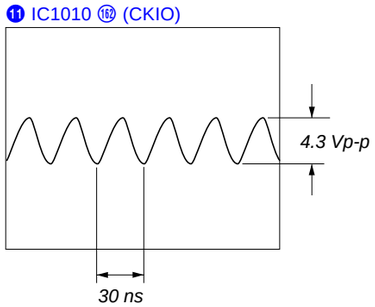
⓯ IC371 ⑯ (SCK)



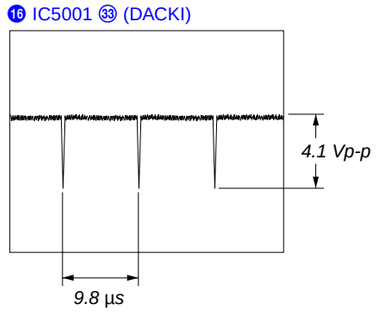
❻ IC4001 ㉛ (BCLK)



⓫ IC1010 ⑯② (CKIO)

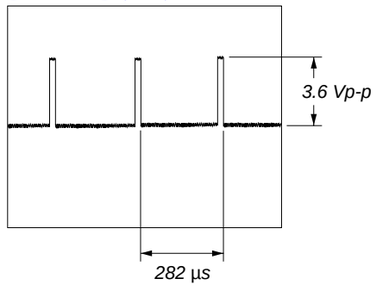


⓰ IC5001 ㉝ (DACKI)

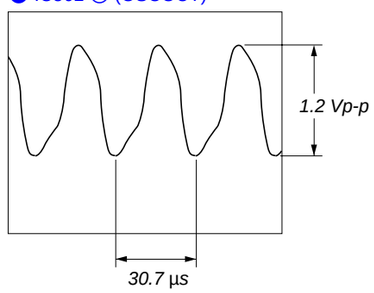


– SUB Board –

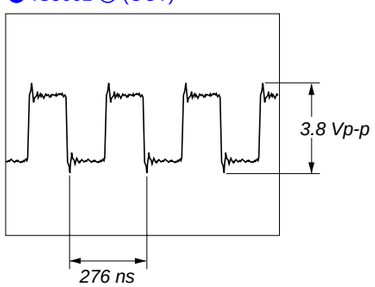
⓱ IC5001 ㉞ (BKO)



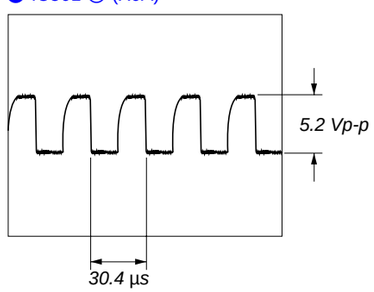
㉑ IC502 ⑧ (OSCOUT)



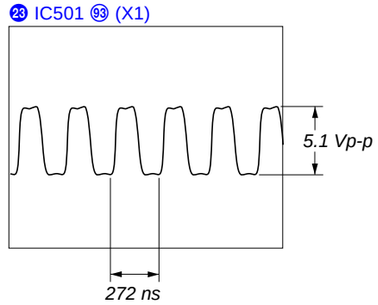
⓲ IC5002 ⑤ (OUT)



㉒ IC501 ㉞ (X0A)

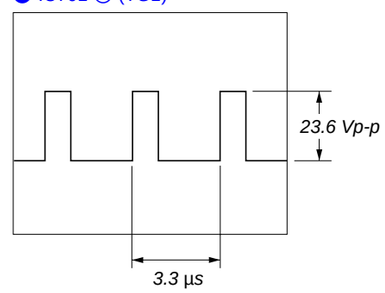


㉓ IC501 ㉝ (X1)

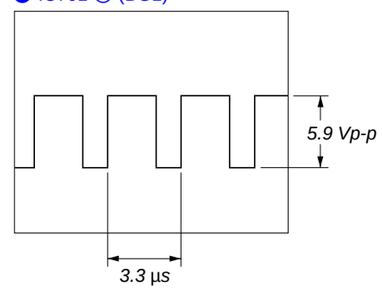


– POWER Board –

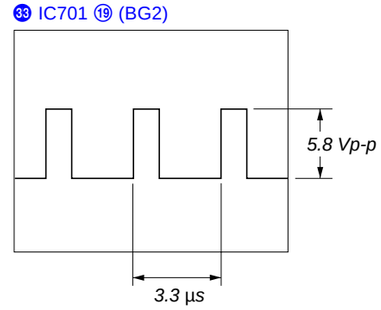
㉛ IC701 ㉗ (TG1)



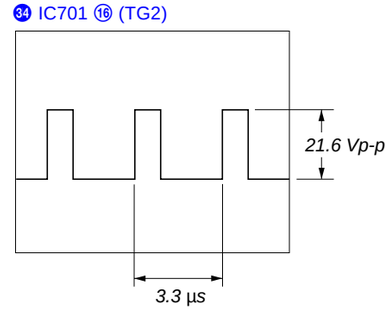
㉜ IC701 ㉓ (BG1)



㉝ IC701 ⑲ (BG2)

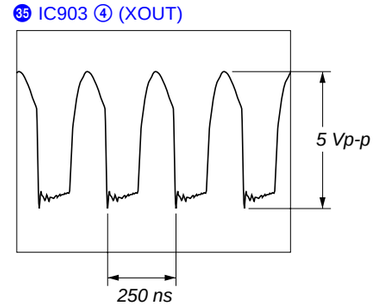


㉞ IC701 ⑯ (TG2)



– DISPLAY Board –

㉟ IC903 ④ (XOUT)

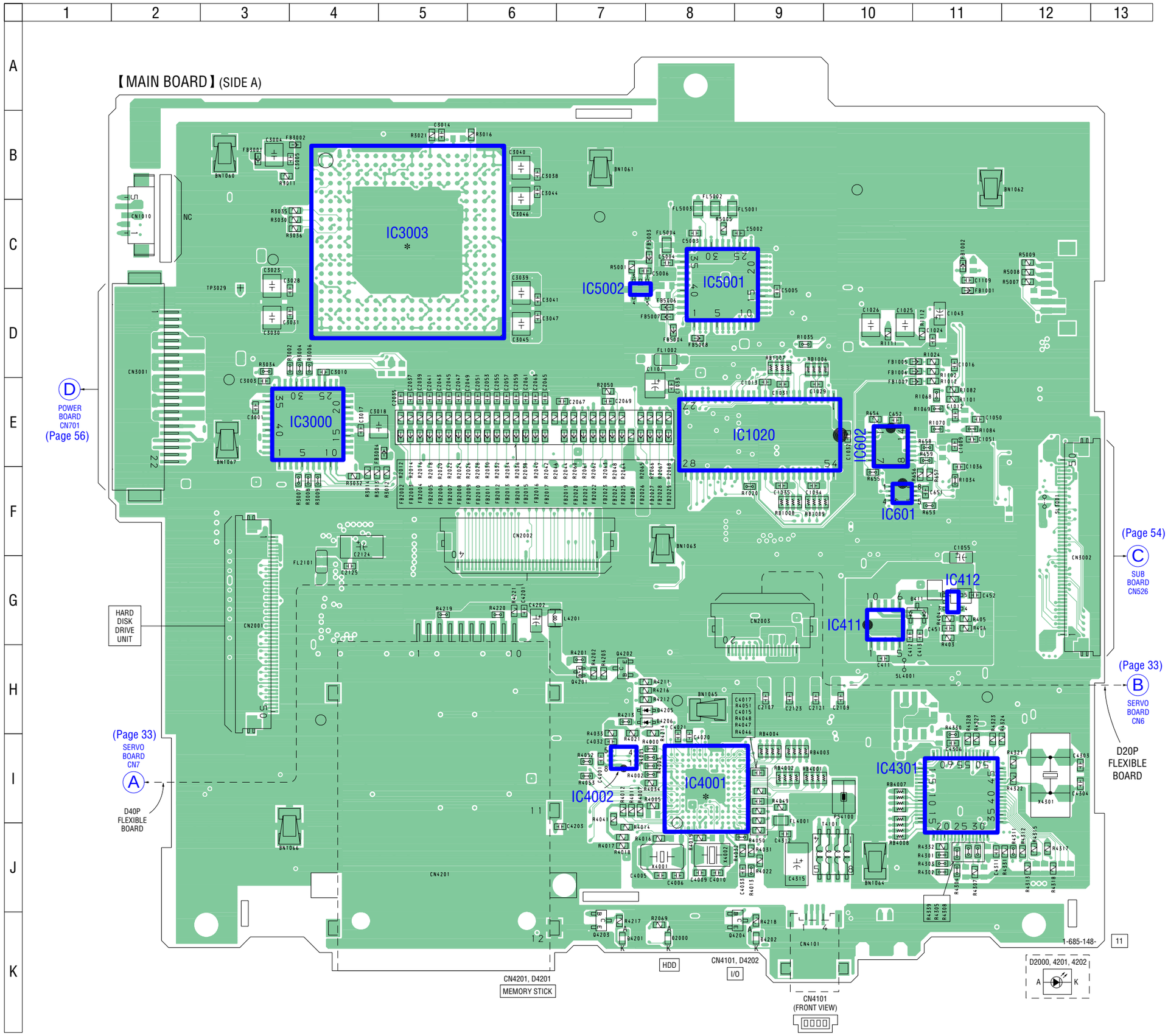


6-11. PRINTED WIRING BOARD – MAIN Board (Side A) –

• See page 31 for Circuit Boards Location.

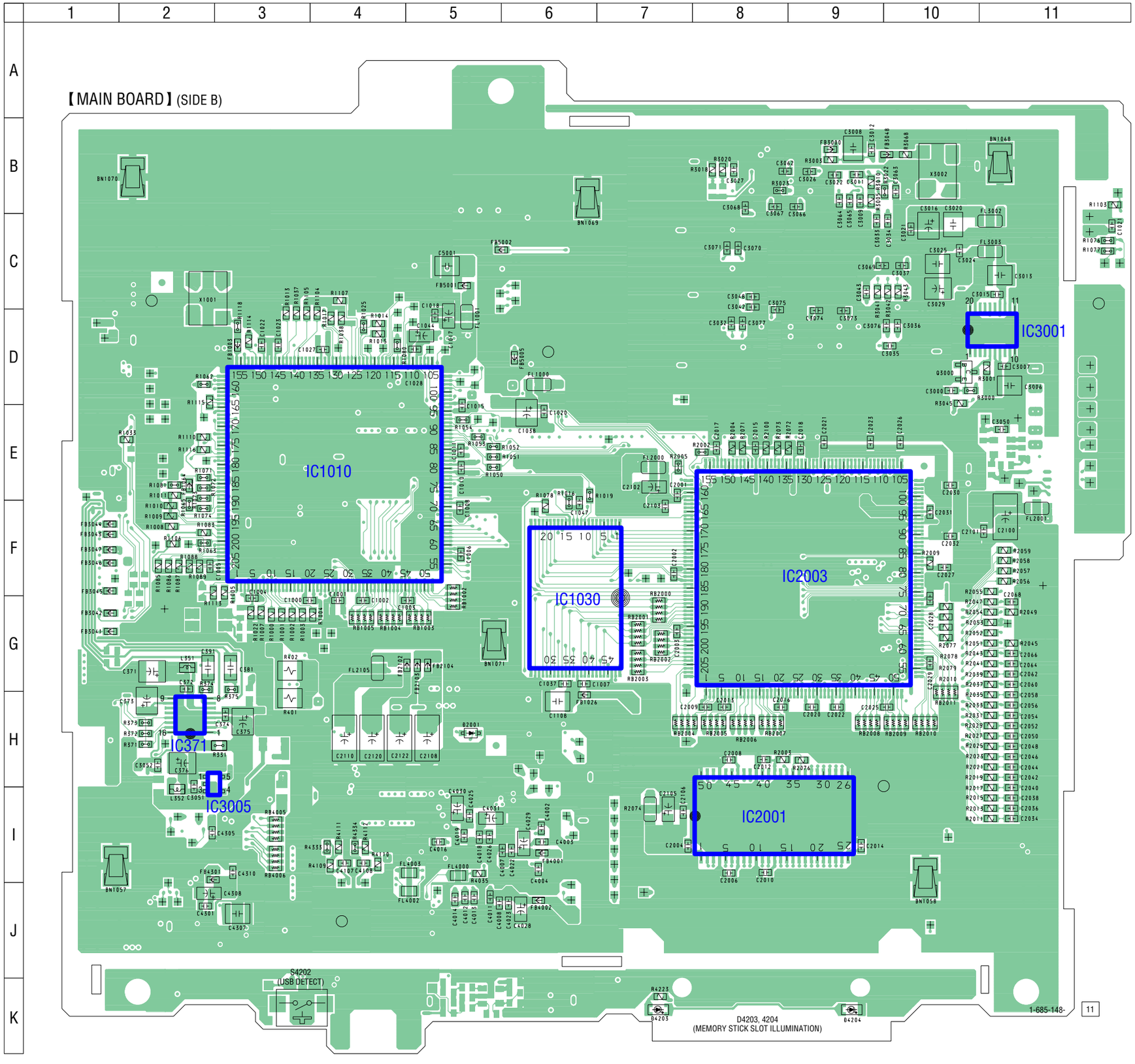
- **Semiconductor Location**

Ref. No.	Location
D411	G-11
D2000	K-8
D4201	K-7
D4202	K-9
D4205	H-8
D4206	H-8
IC411	G-10
IC412	G-11
IC601	F-10
IC602	E-10
IC1020	E-9
IC3000	E-4
IC3003	C-5
IC4001	I-8
IC4002	I-7
IC4301	I-11
IC5001	C-8
IC5002	D-7
Q4201	H-7
Q4202	H-7
Q4203	K-7
Q4204	K-9



6-12. PRINTED WIRING BOARD – MAIN Board (Side B) –

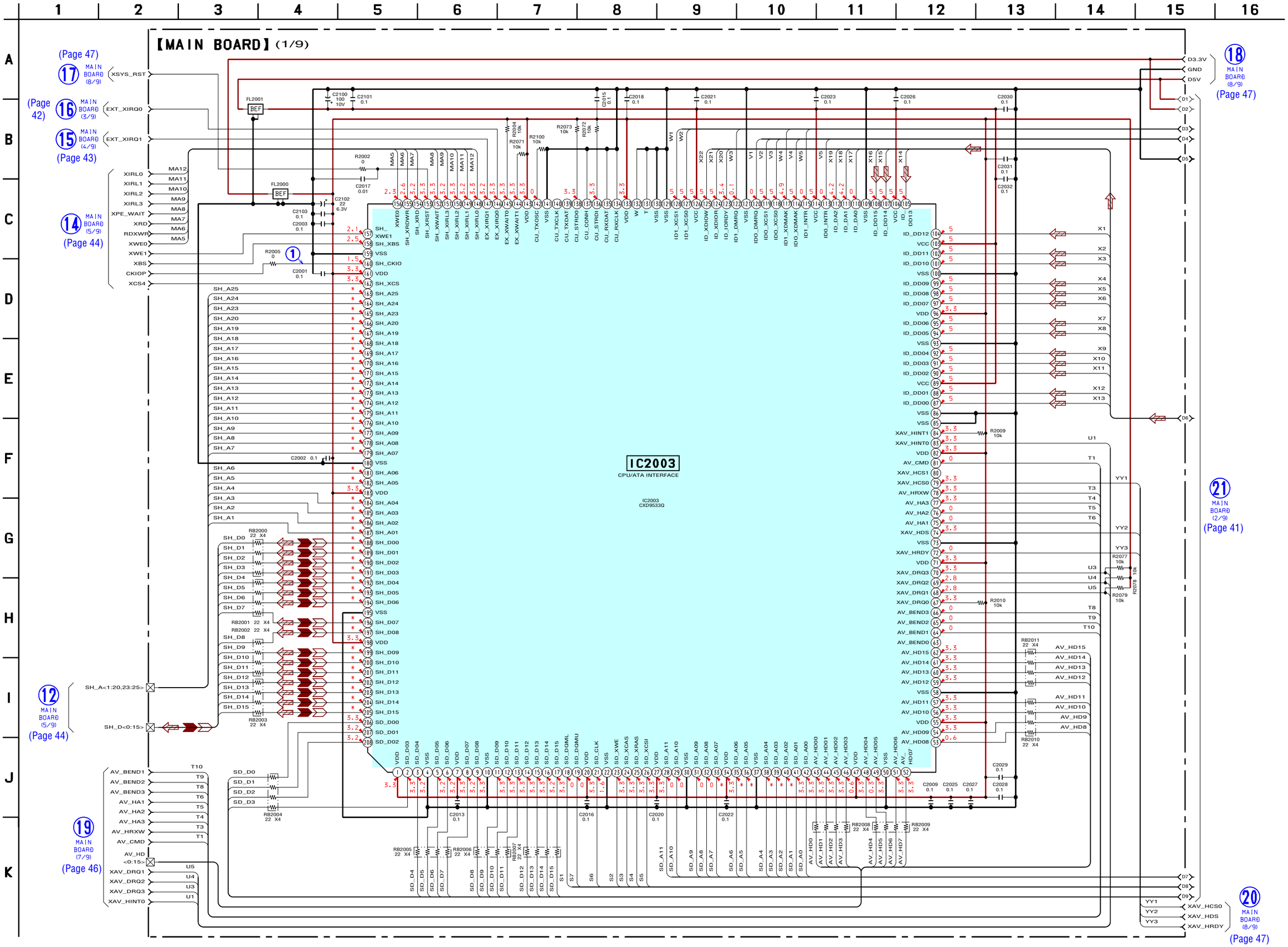
• See page 31 for Circuit Boards Location.



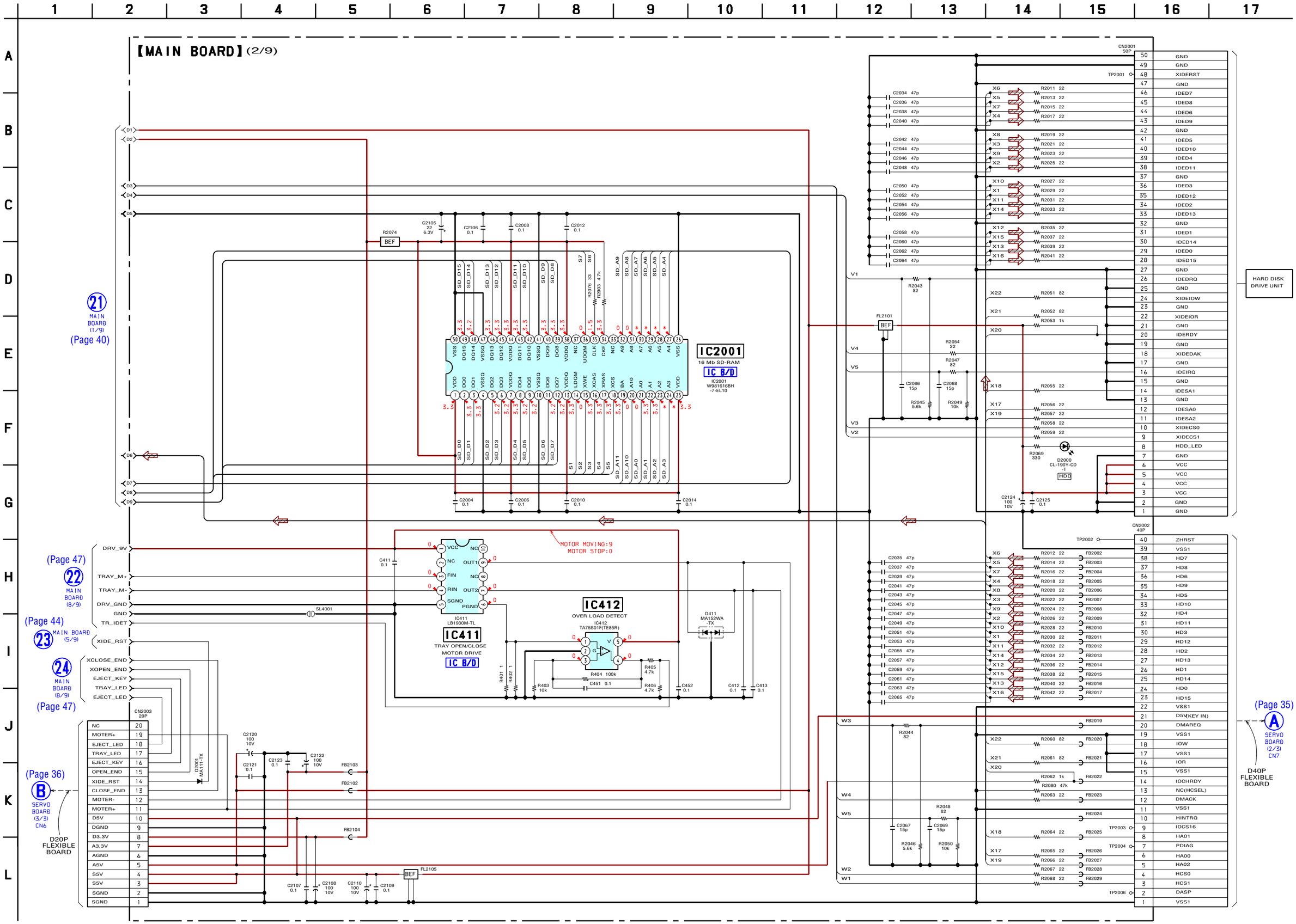
- **Semiconductor Location**

Ref. No.	Location
D2001	H-5
D4203	K-7
D4204	K-9
IC371	H-2
IC1010	E-4
IC1030	G-6
IC2001	I-8
IC2003	F-9
IC3001	D-11
IC3005	H-2
Q3000	D-10

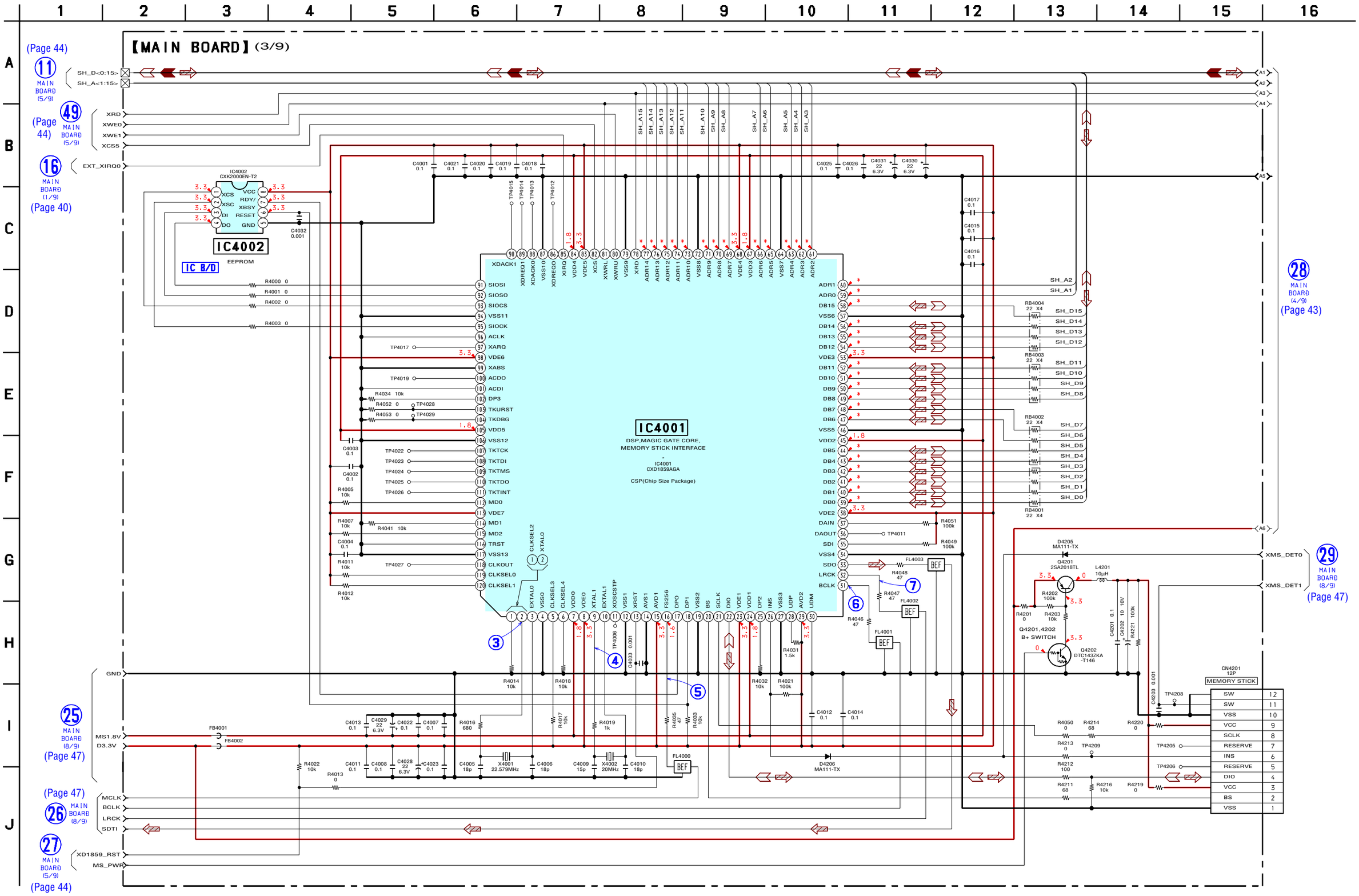
6-13. SCHEMATIC DIAGRAM – MAIN Board (1/9) – • See page 37 for Waveform.



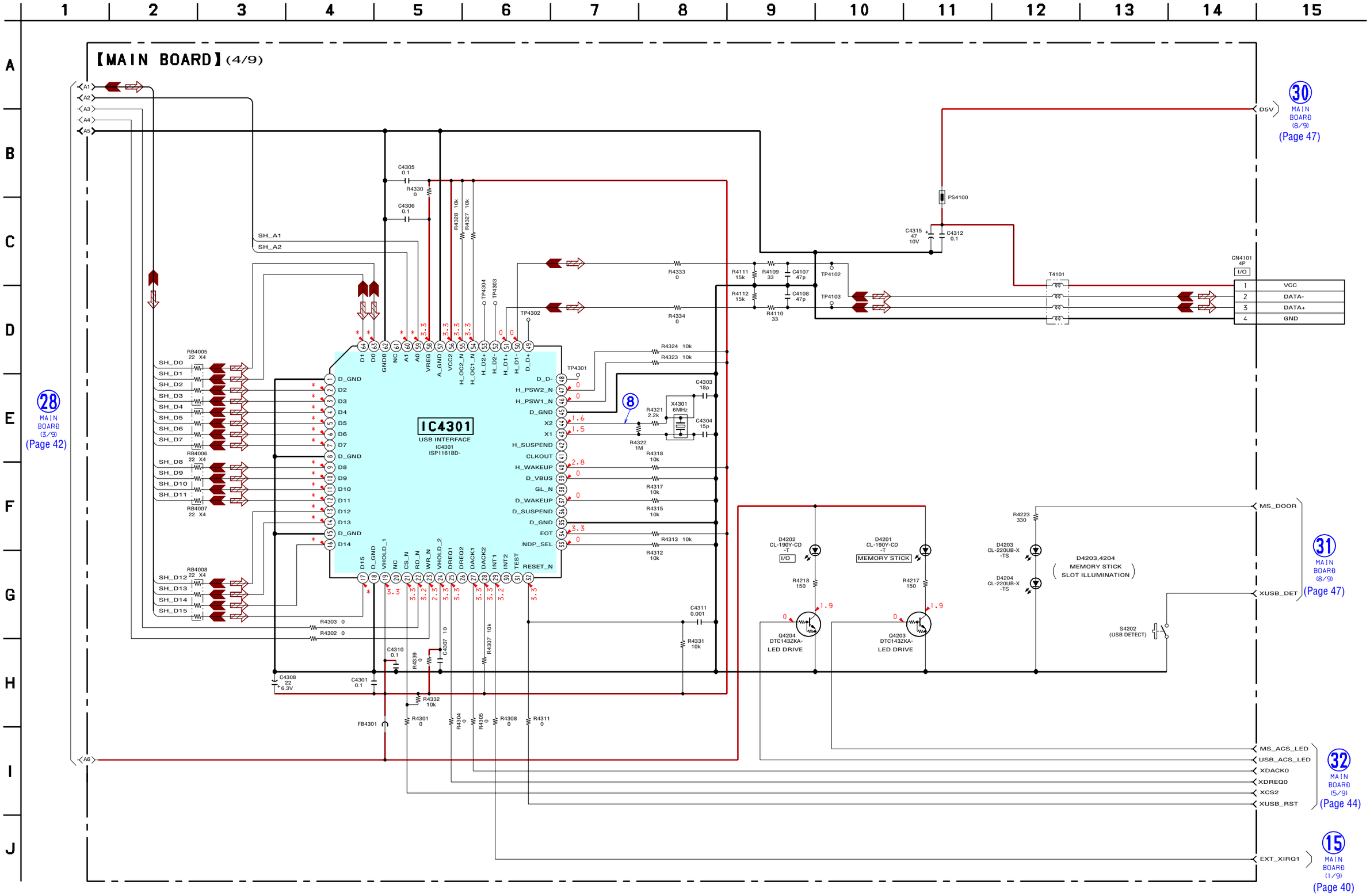
6-14. SCHEMATIC DIAGRAM – MAIN Board (2/9) – • See page 60 for IC Block Diagrams.



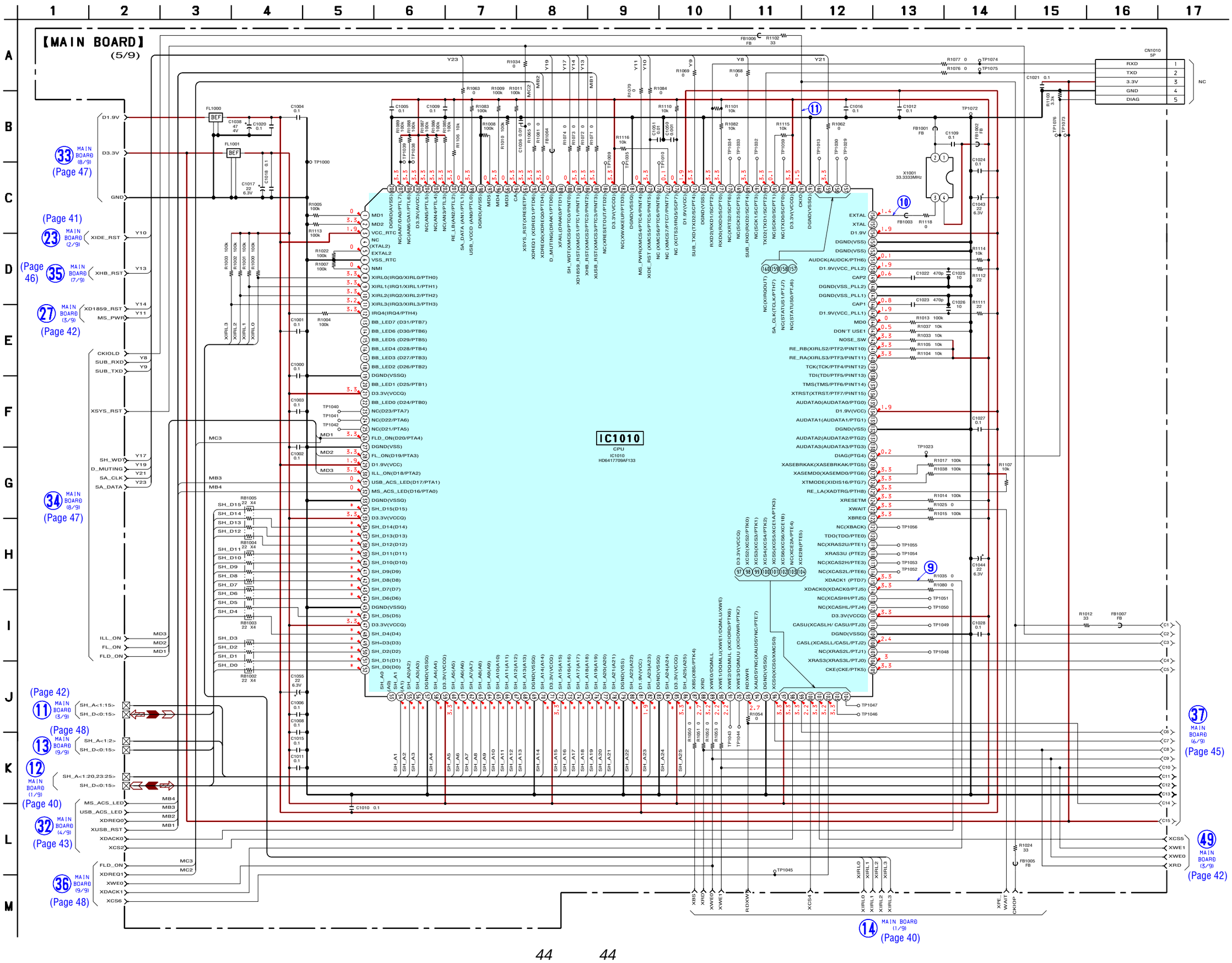
6-15. SCHEMATIC DIAGRAM – MAIN Board (3/9) – • See page 37 for Waveforms.



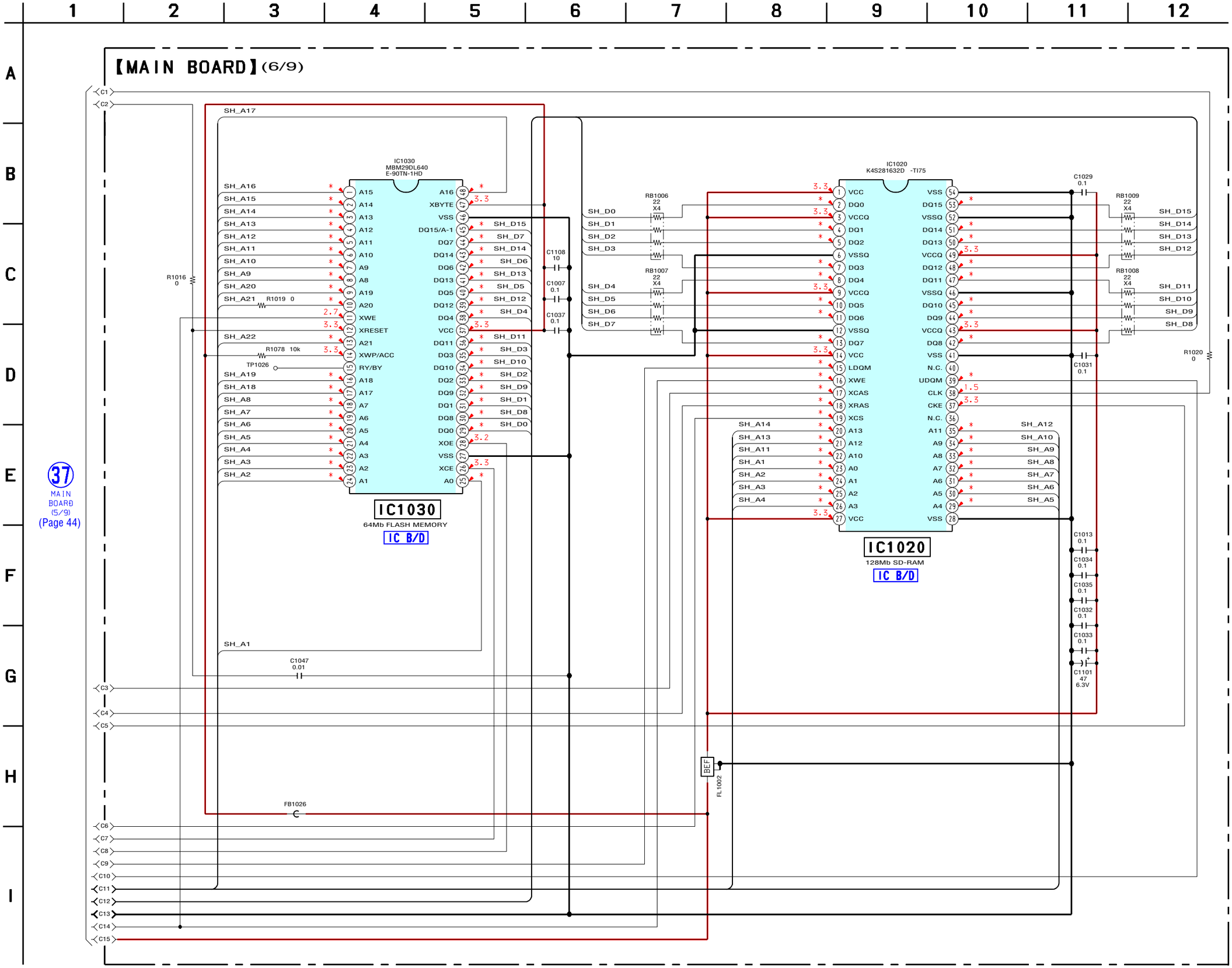
6-16. SCHEMATIC DIAGRAM – MAIN Board (4/9) – • See page 37 for Waveform.



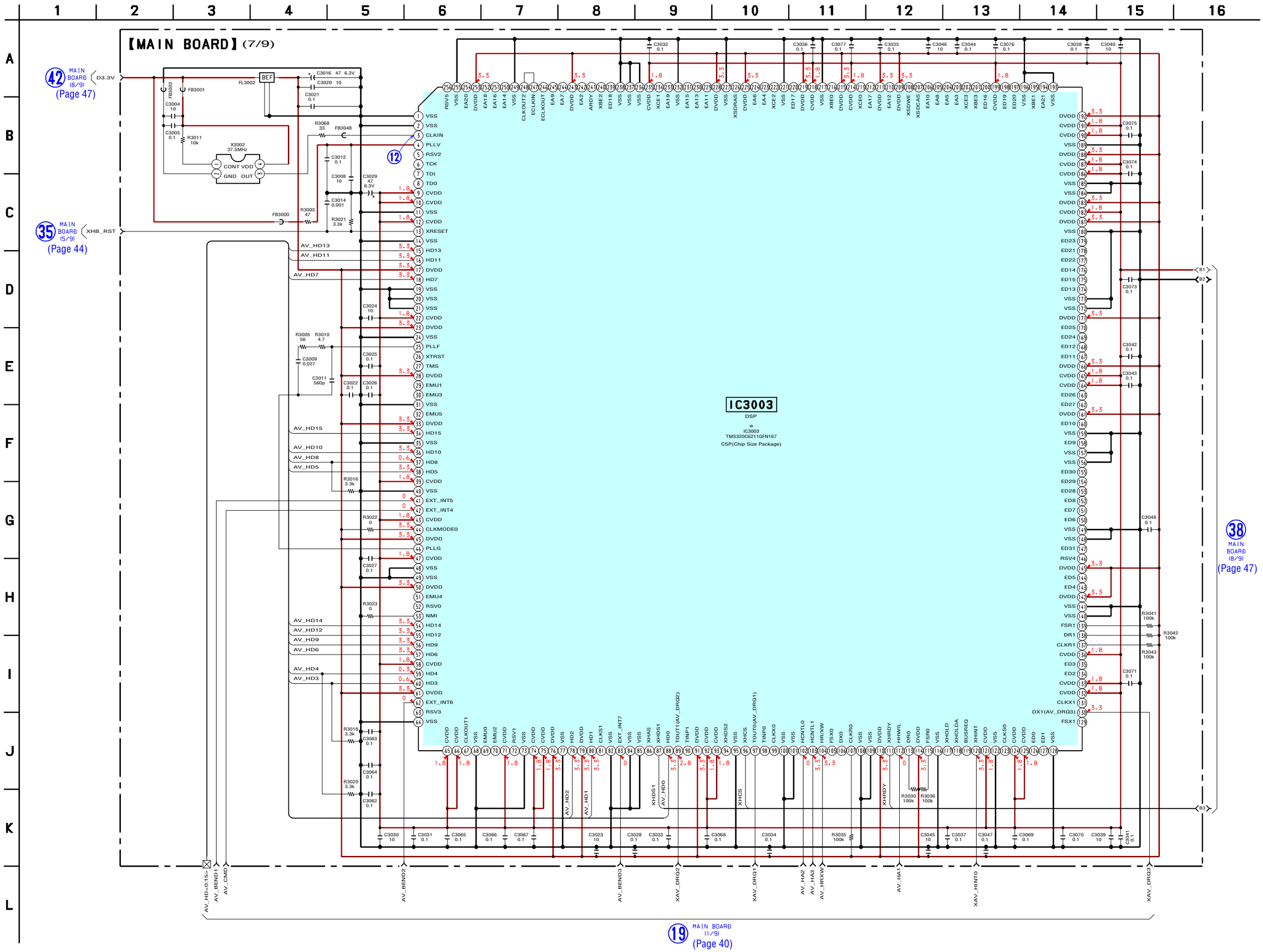
6-17. SCHEMATIC DIAGRAM – MAIN Board (5/9) – • See page 37 for Waveforms.



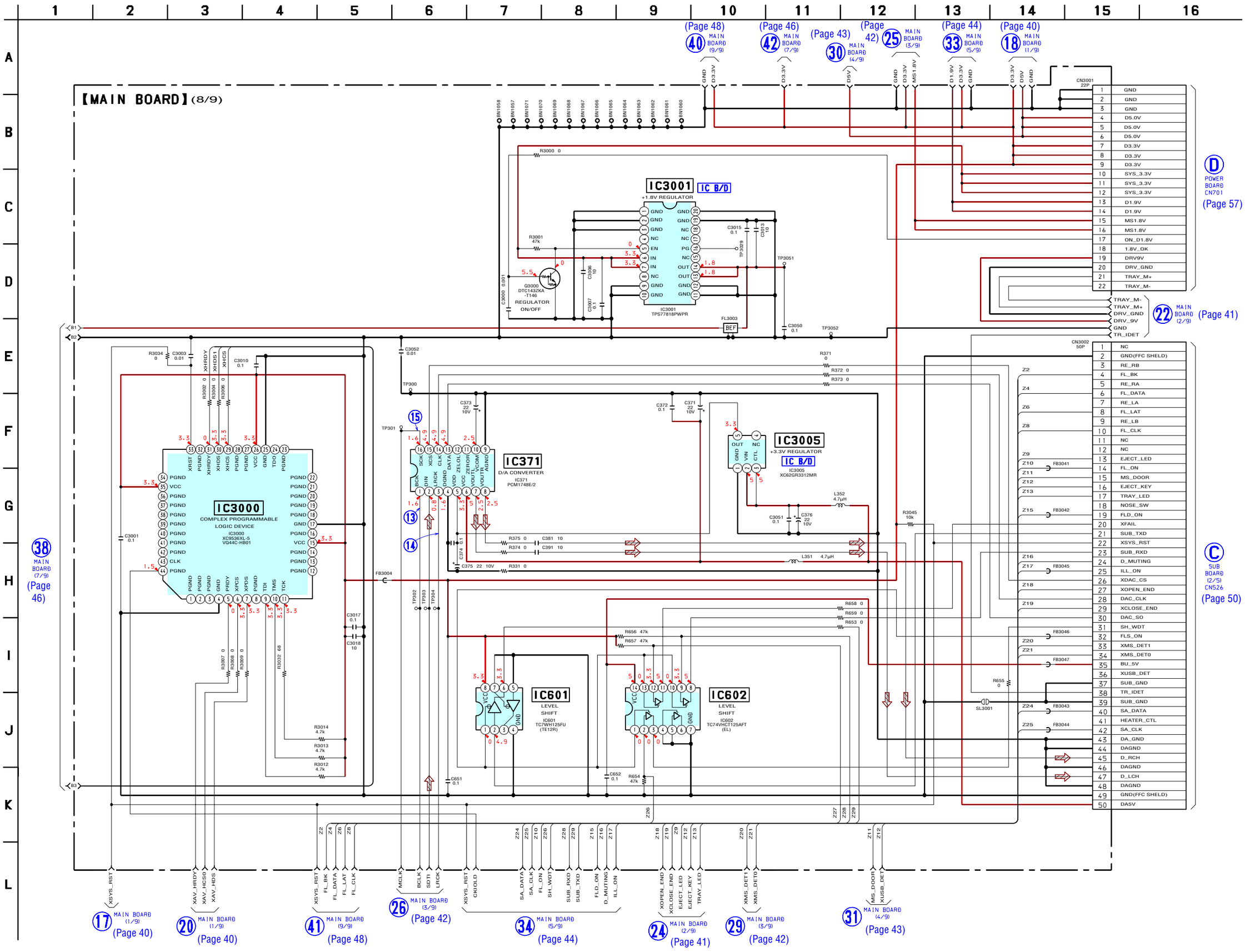
6-18. SCHEMATIC DIAGRAM – MAIN Board (6/9) – • See page 60 for IC Block Diagrams.



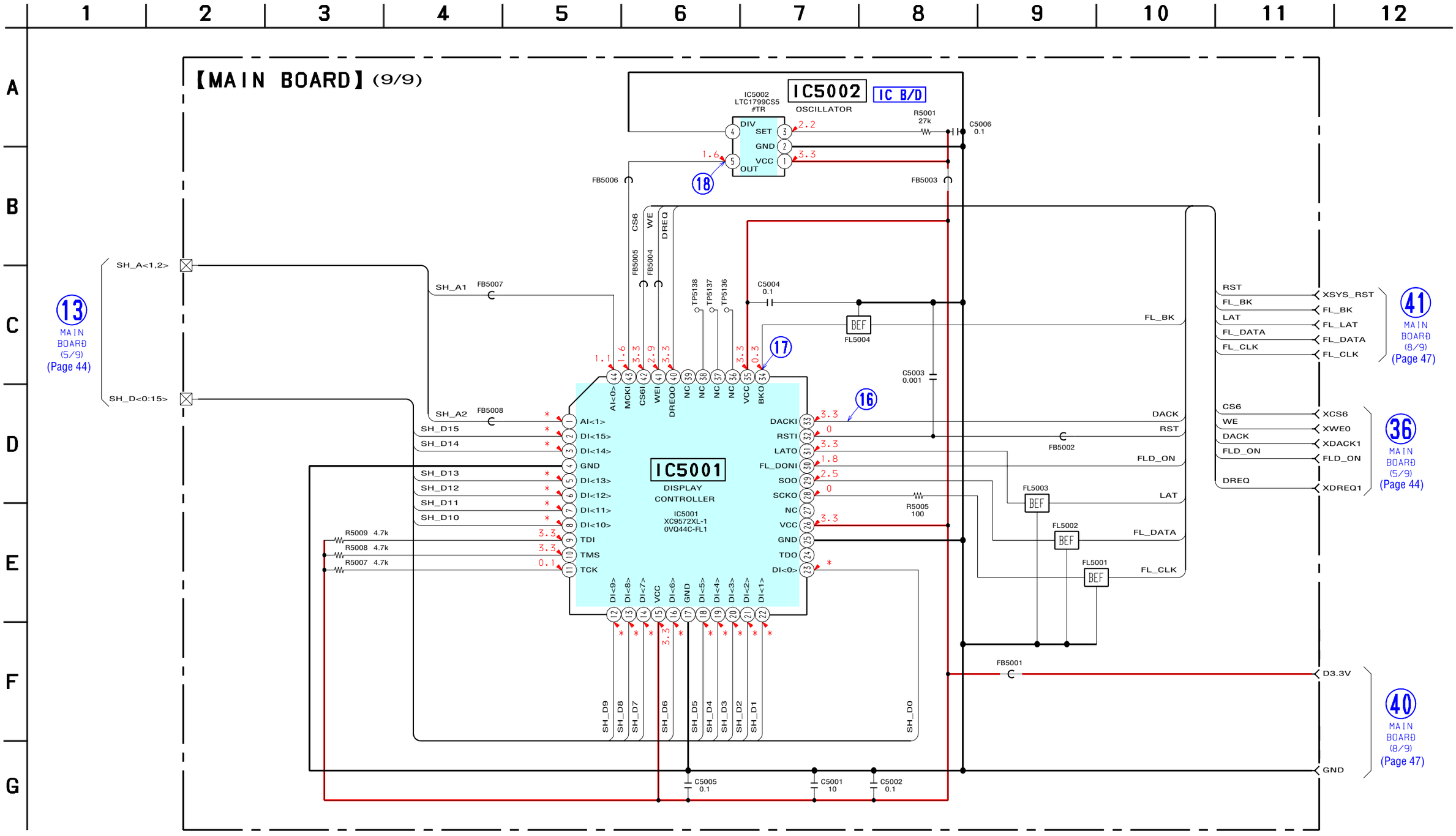
6-19. SCHEMATIC DIAGRAM – MAIN Board (7/9) – • See page 37 for Waveform.



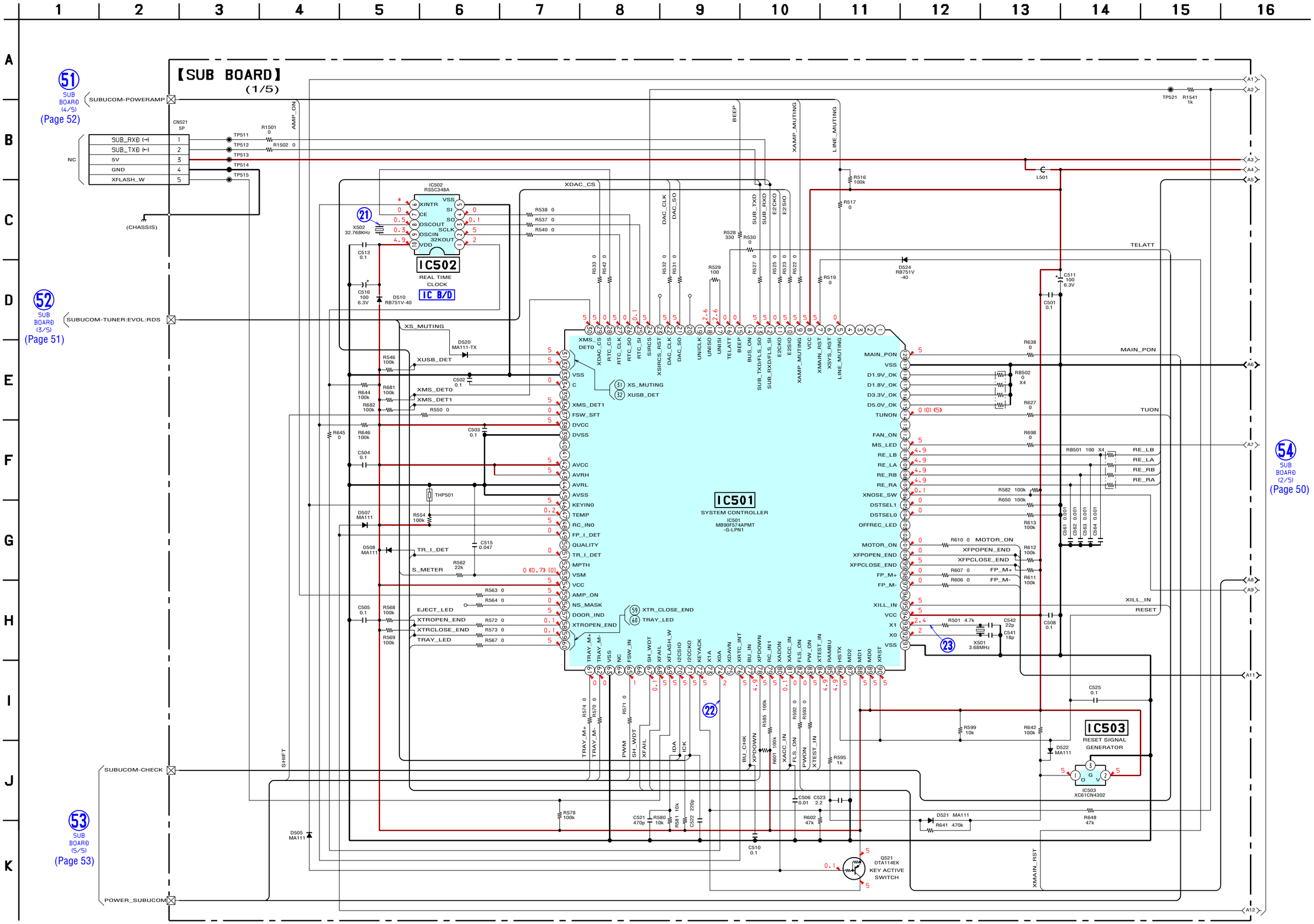
6-20. SCHEMATIC DIAGRAM – MAIN Board (8/9) – • See page 37 for Waveforms. • See page 60 for IC Block Diagrams.



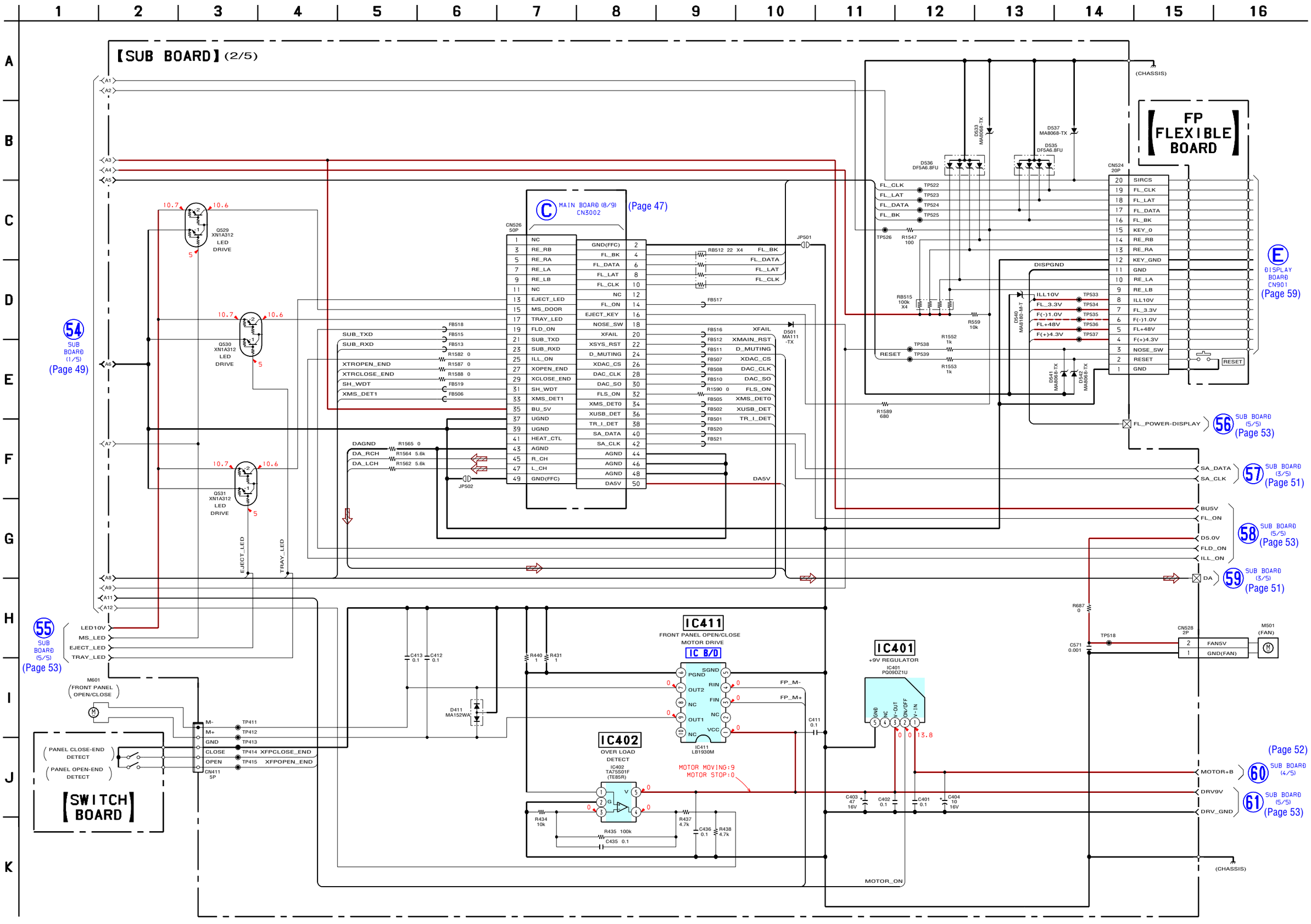
6-21. SCHEMATIC DIAGRAM – MAIN Board (9/9) – • See page 37 for Waveforms. • See page 60 for IC Block Diagram.



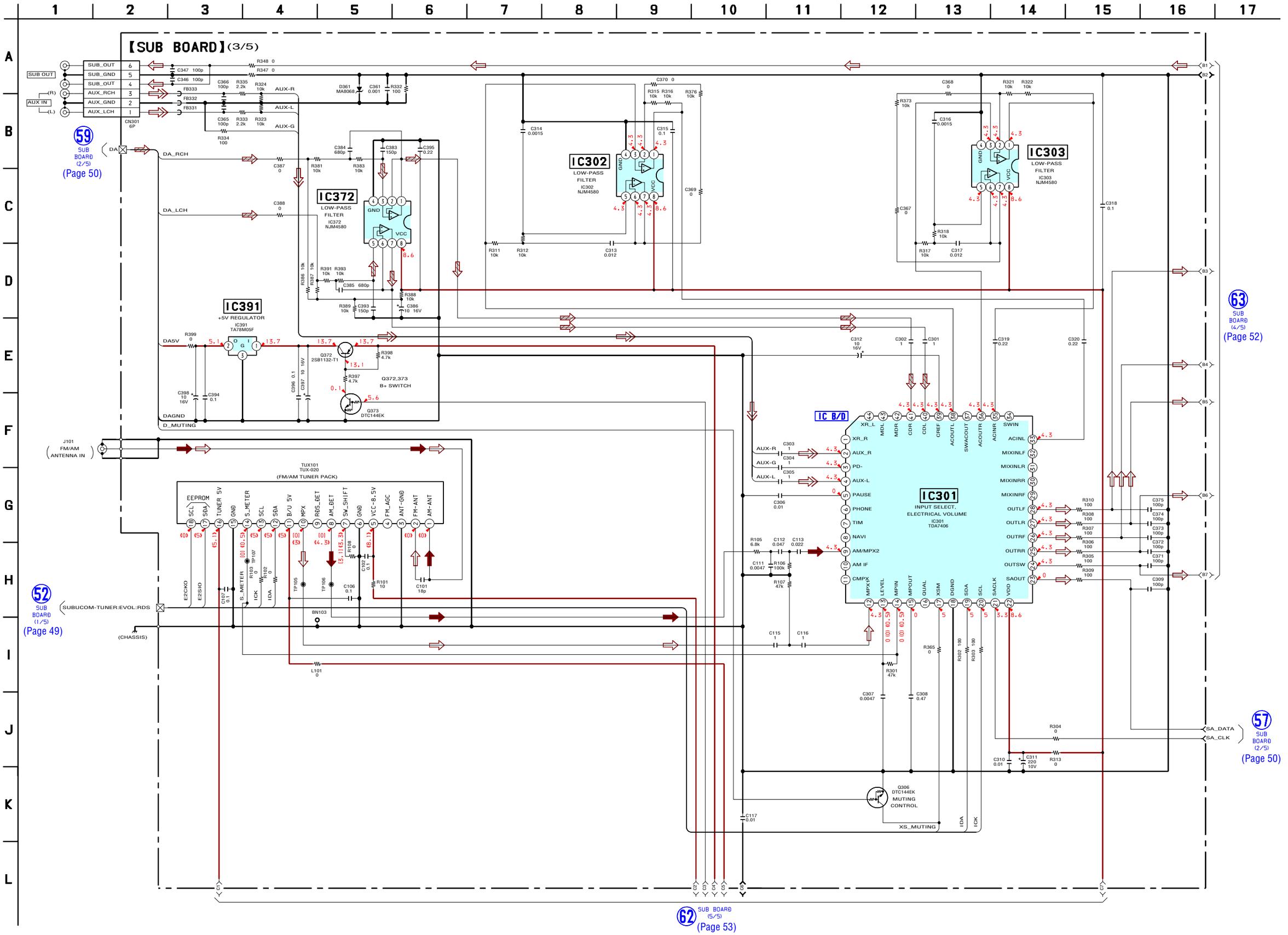
6-22. SCHEMATIC DIAGRAM – SUB Board (1/5) – • See page 37 for Waveforms. • See page 60 for IC Block Diagram.



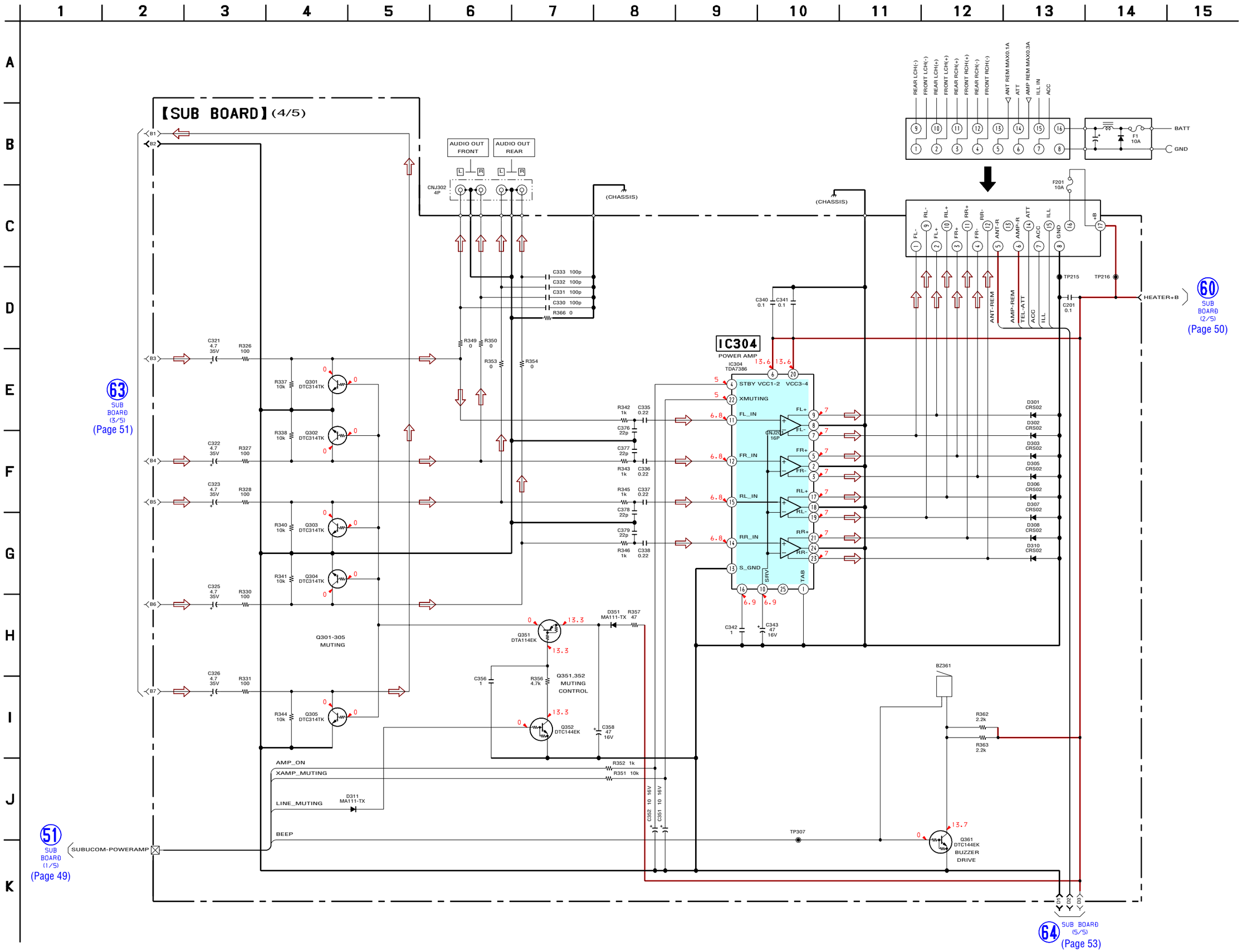
6-23. SCHEMATIC DIAGRAM – SUB (2/5)/SWITCH Boards – • See page 60 for IC Block Diagram.



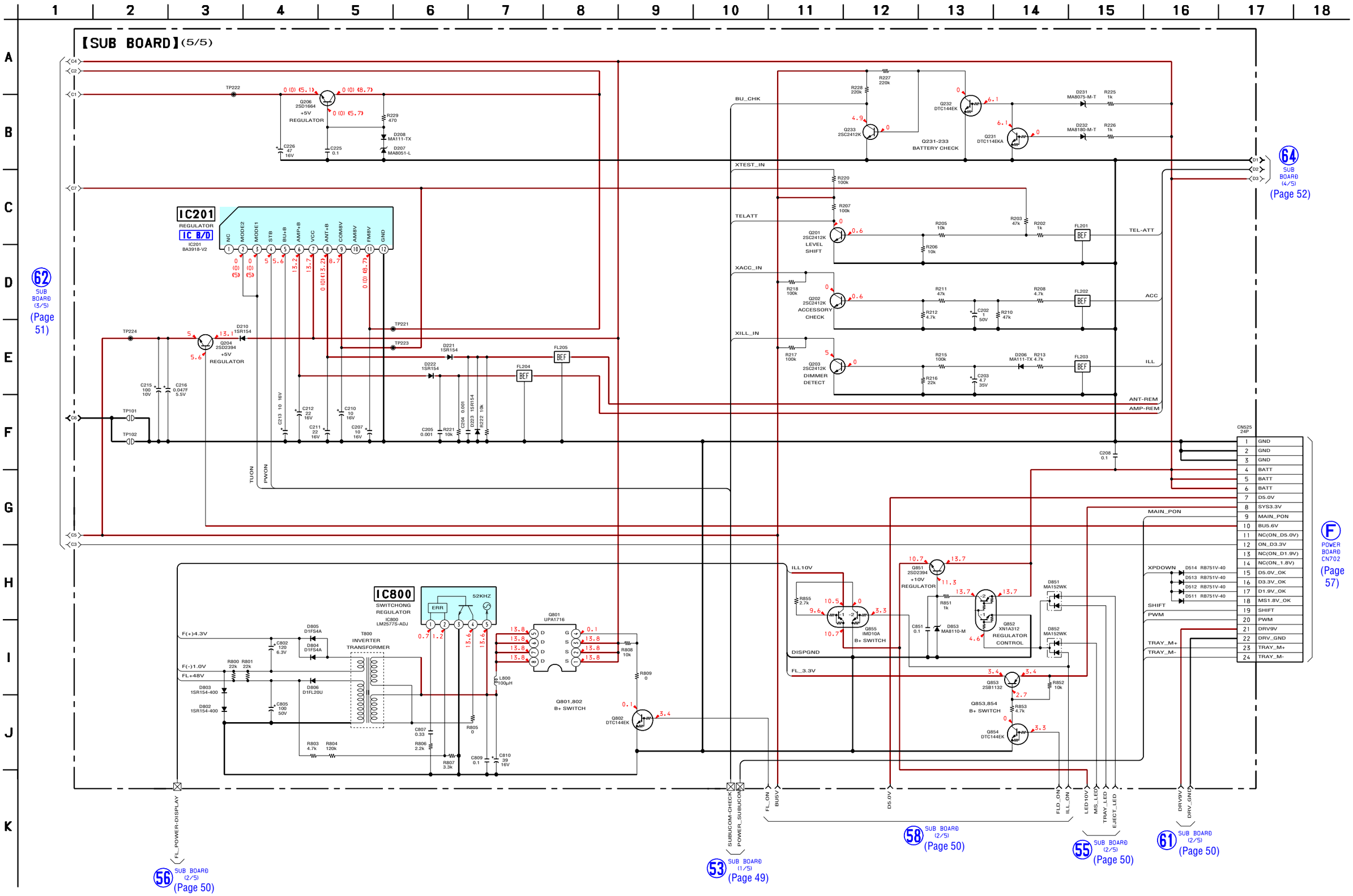
6-24. SCHEMATIC DIAGRAM – SUB Board (3/5) – • See page 60 for IC Block Diagram.



6-25. SCHEMATIC DIAGRAM – SUB Board (4/5) –

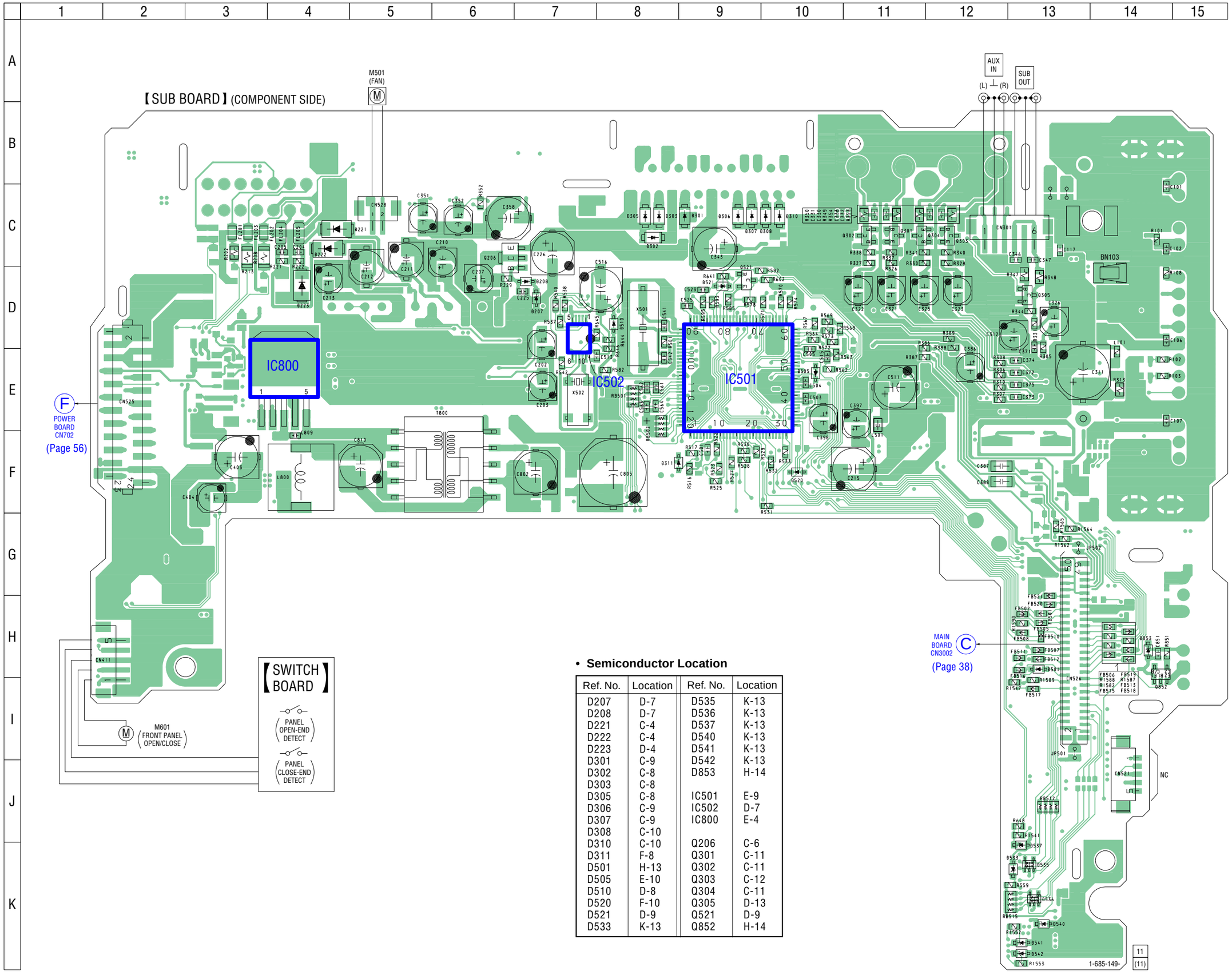


6-26. SCHEMATIC DIAGRAM – SUB Board (5/5) – • See page 60 for IC Block Diagram.



6-27. PRINTED WIRING BOARDS – SUB (Component Side)/SWITCH Boards –

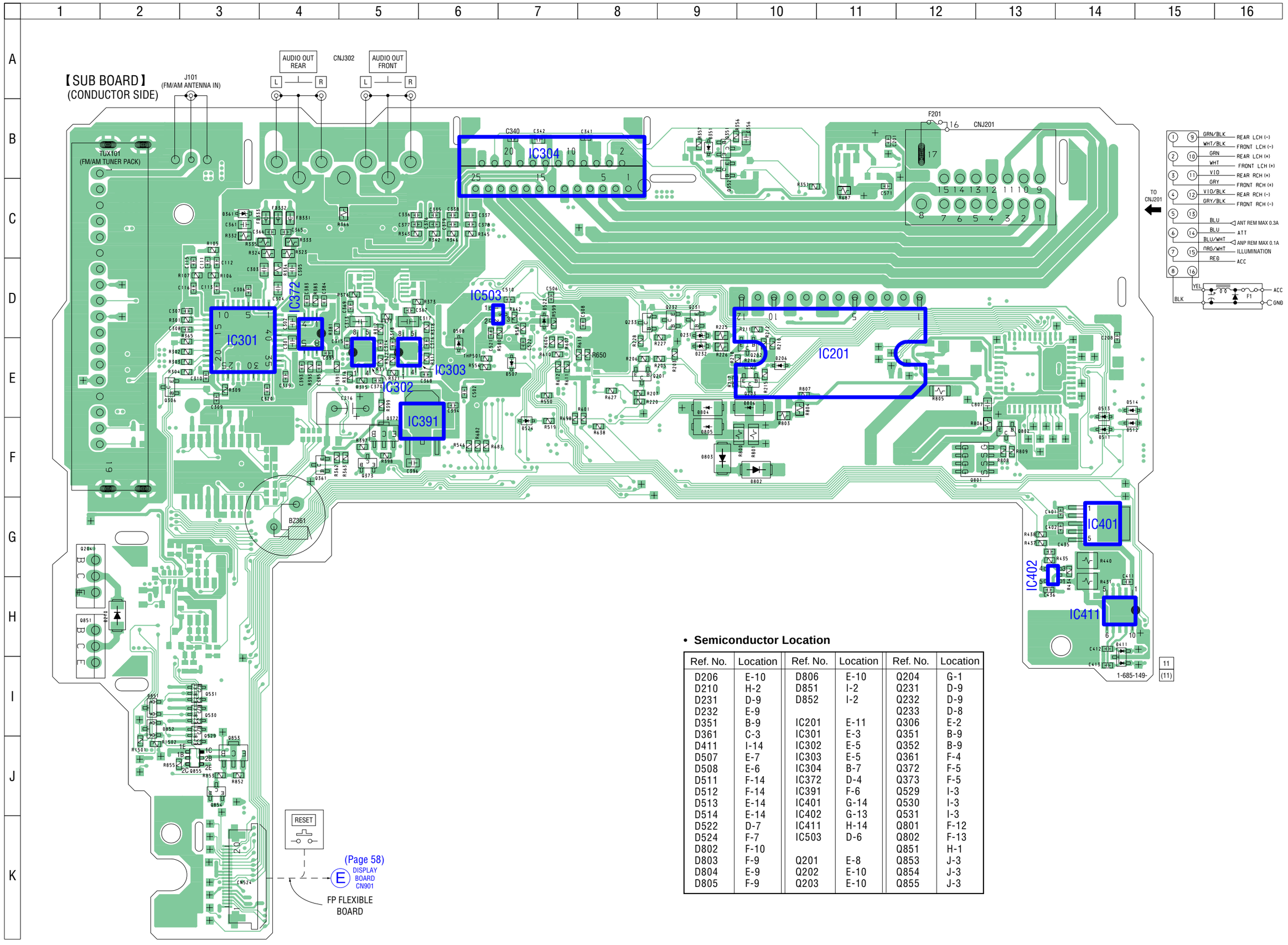
• See page 37 for Circuit Boards Location.



- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D207	D-7	D535	K-13
D208	D-7	D536	K-13
D221	C-4	D537	K-13
D222	C-4	D540	K-13
D223	D-4	D541	K-13
D301	C-9	D542	K-13
D302	C-8	D853	H-14
D303	C-8		
D305	C-8	IC501	E-9
D306	C-9	IC502	D-7
D307	C-9	IC800	E-4
D308	C-10		
D310	C-10	Q206	C-6
D311	F-8	Q301	C-11
D501	H-13	Q302	C-11
D505	E-10	Q303	C-12
D510	D-8	Q304	C-11
D520	F-10	Q305	D-13
D521	D-9	Q521	D-9
D533	K-13	Q852	H-14

6-28. PRINTED WIRING BOARD – SUB Board (Conductor Side) – • See page 37 for Circuit Boards Location.



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D206	E-10	D806	E-10	Q204	G-1
D210	H-2	D851	I-2	Q231	D-9
D231	D-9	D852	I-2	Q232	D-9
D232	E-9			Q233	D-8
D351	B-9	IC201	E-11	Q306	E-2
D361	C-3	IC301	E-3	Q351	B-9
D411	I-14	IC302	E-5	Q352	B-9
D507	E-7	IC303	E-5	Q361	F-4
D508	E-6	IC304	B-7	Q372	F-5
D511	F-14	IC372	D-4	Q373	F-5
D512	F-14	IC391	F-6	Q529	I-3
D513	E-14	IC401	G-14	Q530	I-3
D514	E-14	IC402	G-13	Q531	I-3
D522	D-7	IC411	H-14	Q801	F-12
D524	F-7	IC503	D-6	Q802	F-13
D802	F-10			Q851	H-1
D803	F-9	Q201	E-8	Q853	J-3
D804	E-9	Q202	E-10	Q854	J-3
D805	F-9	Q203	E-10	Q855	J-3

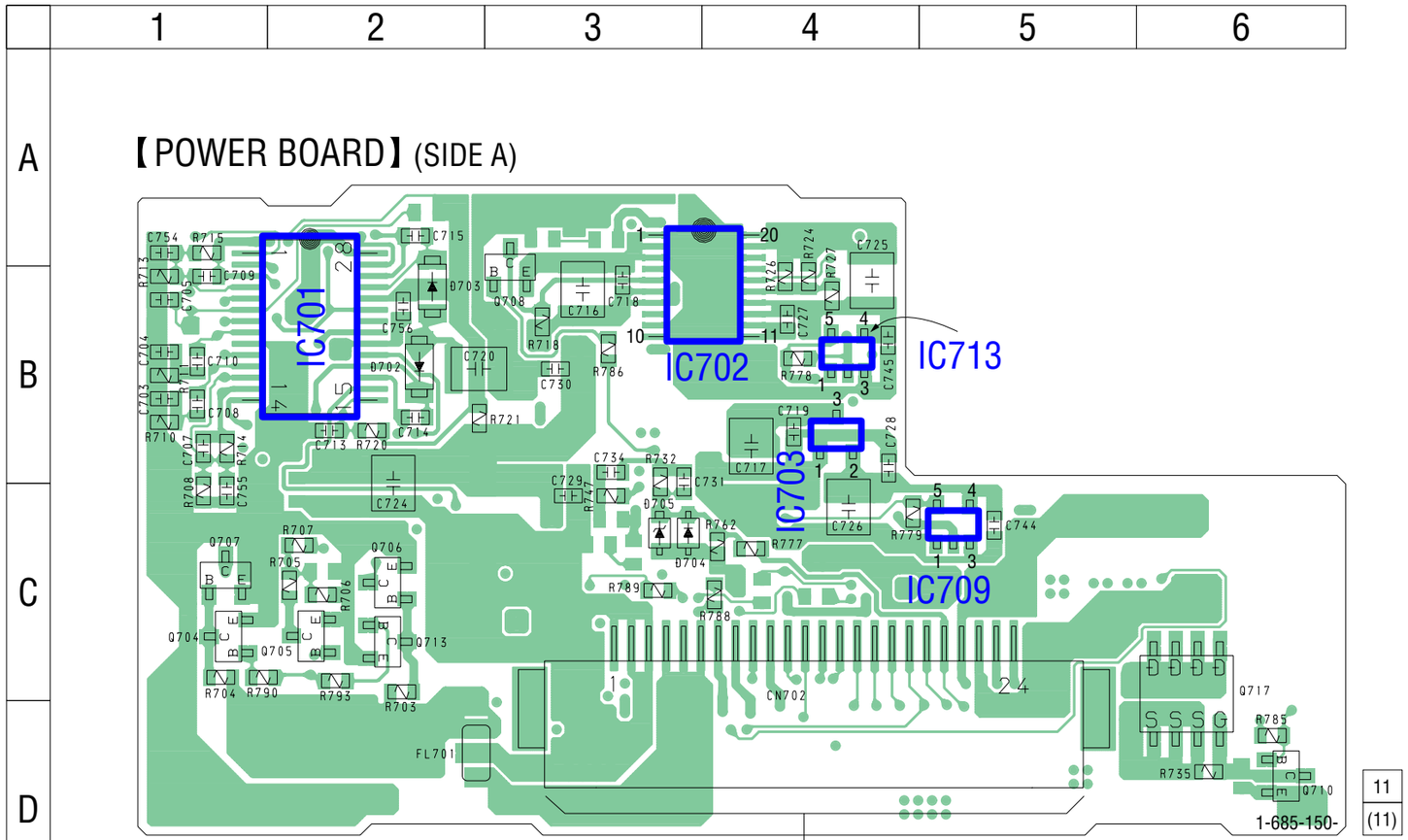
6-29. PRINTED WIRING BOARD – POWER Board –

• See page 37 for Circuit Boards Location.

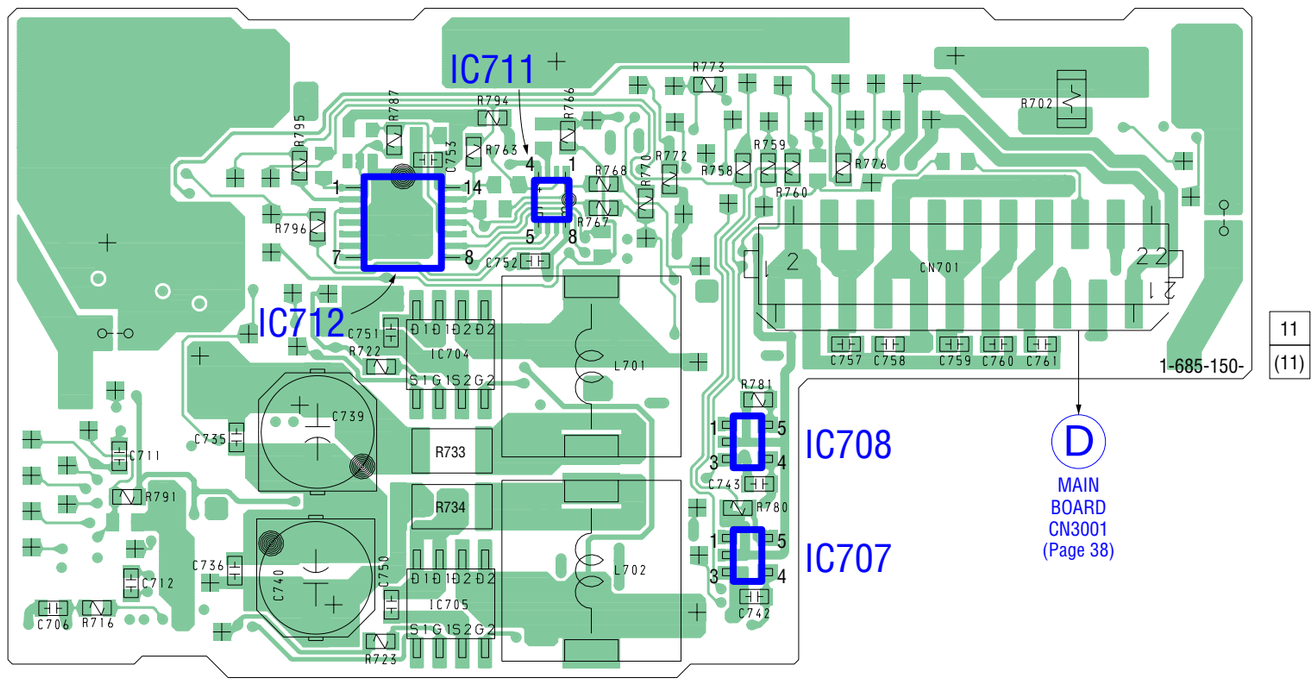
• **Semiconductor Location**

Ref. No.	Location
D702	B-2
D703	B-2
D704	C-3
D705	C-3
IC701	B-2
IC702	B-4
IC703	B-4
IC704	F-3
IC705	G-3
IC707	G-4
IC708	G-4
IC709	C-5
IC711	F-3
IC712	F-3
IC713	B-4
Q704	C-1
Q705	C-2
Q706	C-2
Q707	C-1
Q708	B-3
Q710	D-6
Q713	C-2
Q717	C-6

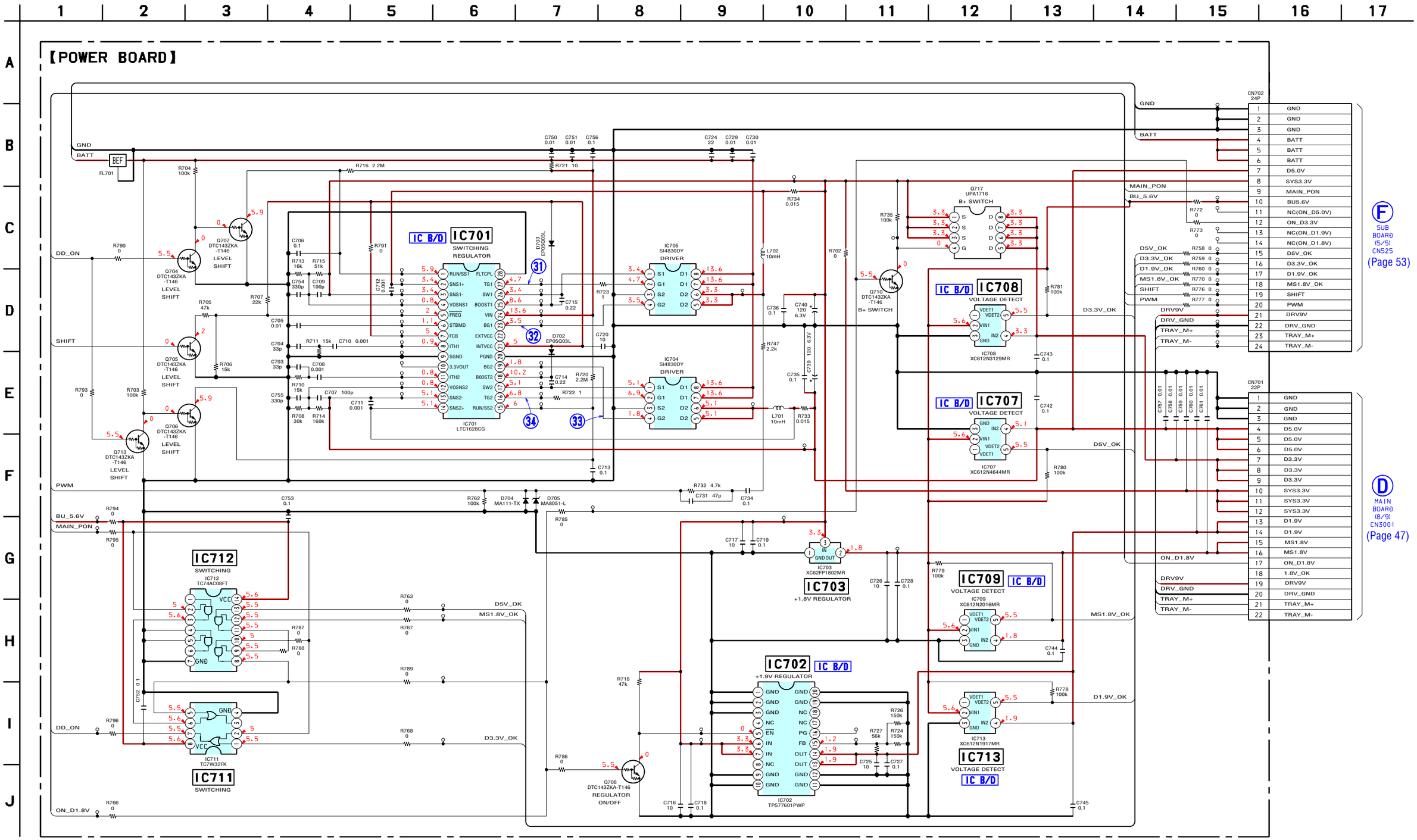
【POWER BOARD】(SIDE A)



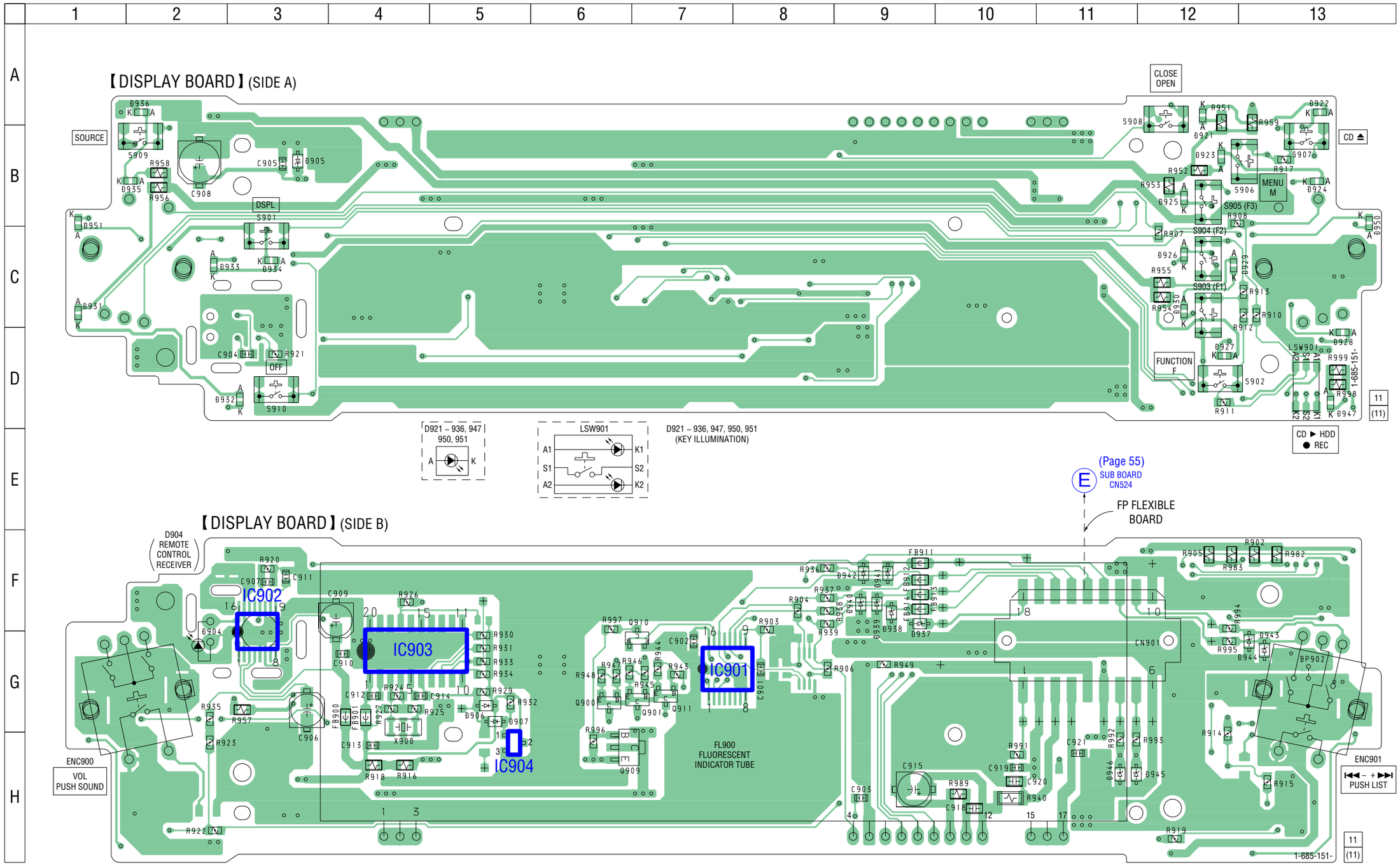
【POWER BOARD】(SIDE B)



6-30. SCHEMATIC DIAGRAM – POWER Board – • See page 37 for Waveforms. • See page 60 for IC Block Diagrams.



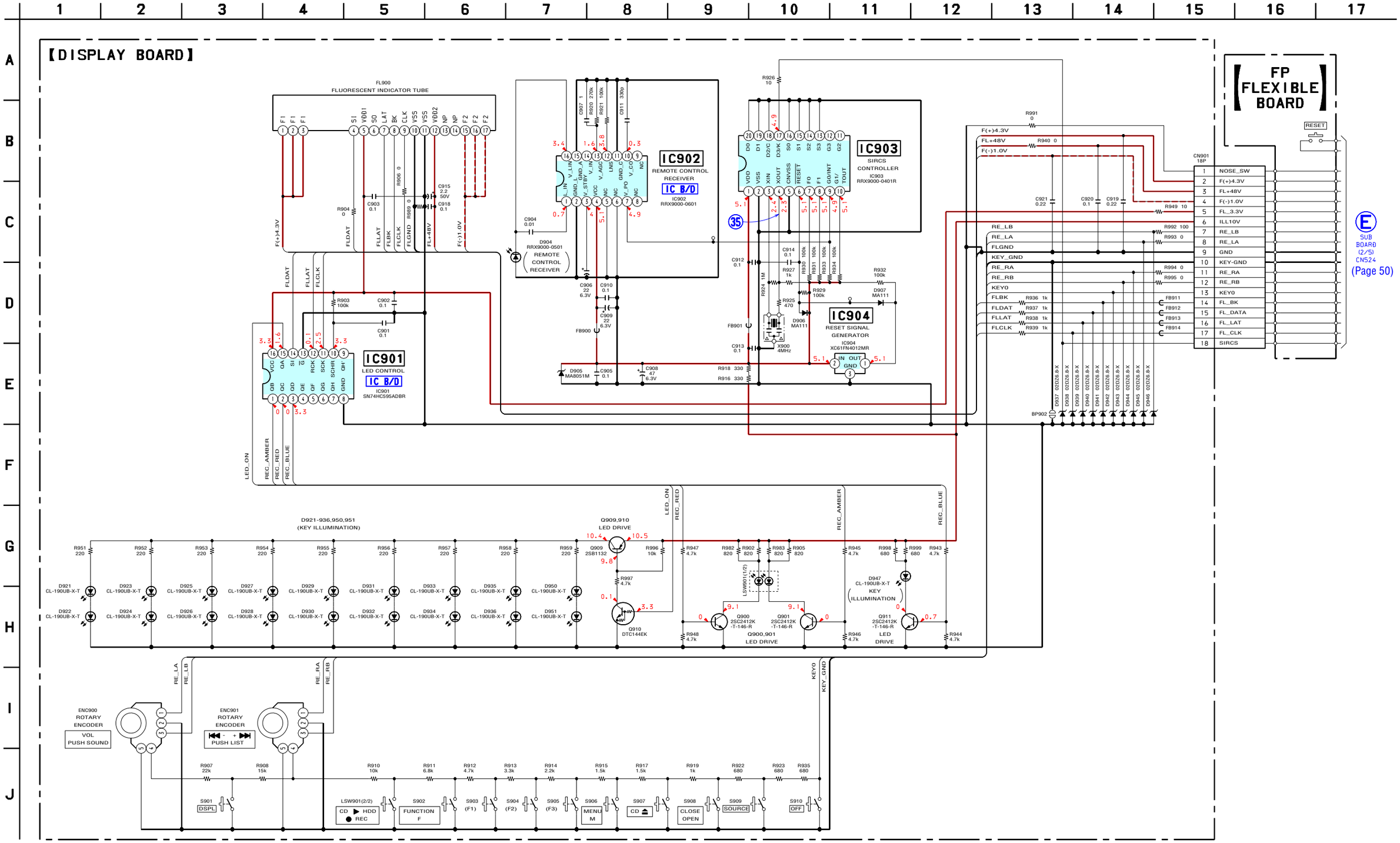
6-31. PRINTED WIRING BOARD – DISPLAY Board – • See page 37 for Circuit Boards Location.



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D904	G-2	D928	D-13	D939	F-9	IC901	G-7
D905	B-3	D929	C-12	D940	F-9	IC902	F-3
D906	G-5	D930	C-12	D941	F-9	IC903	G-4
D907	G-5	D931	C-1	D942	F-9	IC904	H-5
D921	A-12	D932	D-3	D943	G-13		
D922	A-13	D933	C-2	D944	G-13	Q900	G-6
D923	B-12	D934	C-3	D945	H-11	Q901	G-7
D924	B-13	D935	B-2	D946	H-11	Q909	H-6
D925	B-12	D936	A-2	D947	D-13	Q910	G-7
D926	C-12	D937	F-9	D950	B-13	Q911	G-7
D927	D-12	D938	F-9	D951	B-1		

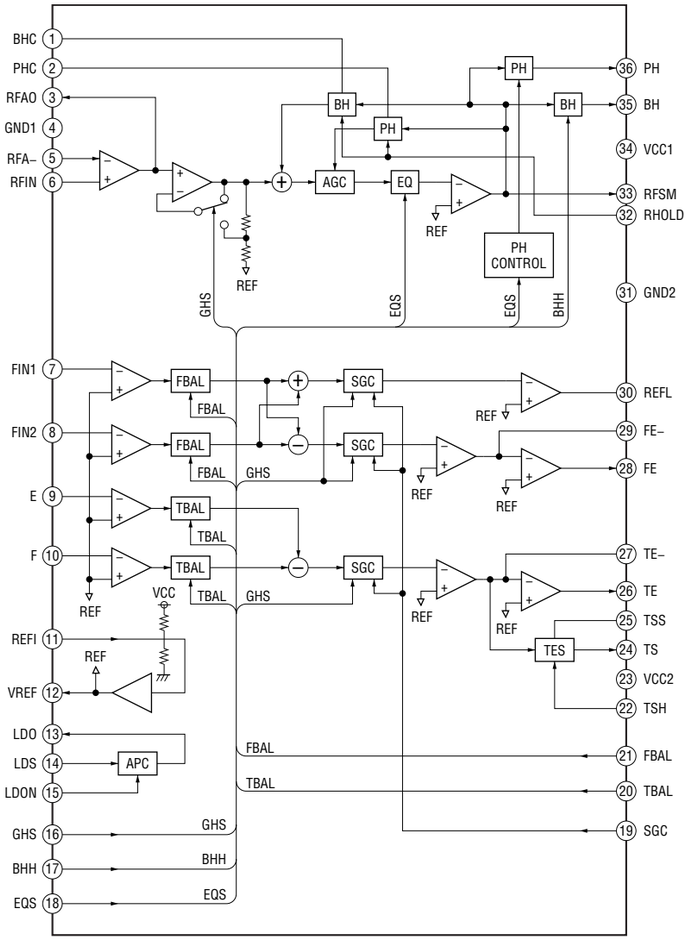
6-32. SCHEMATIC DIAGRAM – DISPLAY Board – • See page 37 for Waveform. • See page 52 for IC Block Diagrams.



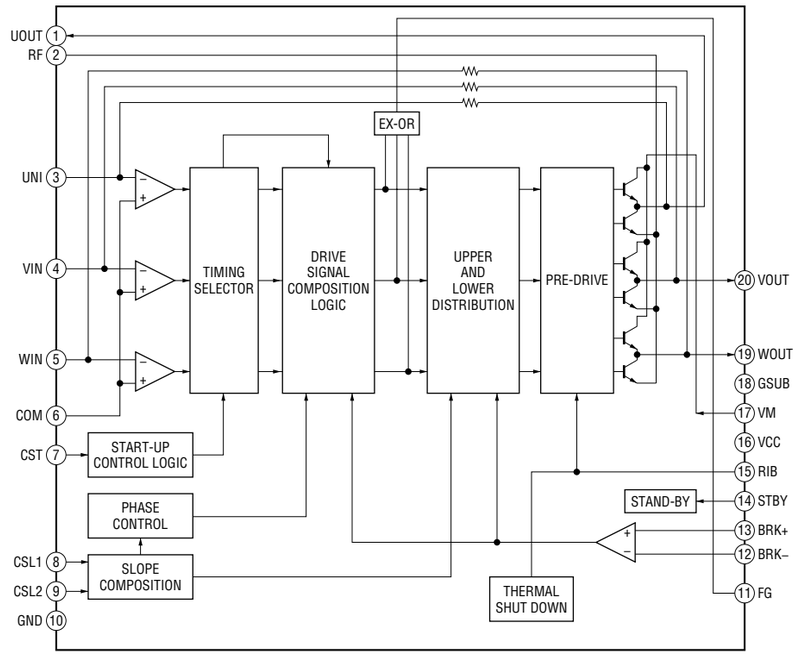
- **IC Block Diagrams**

– SERVO Board –

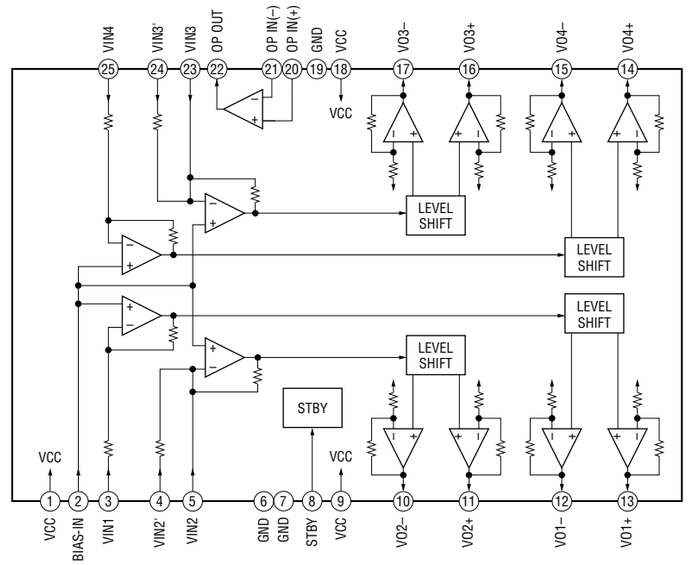
IC1 LA9246T-TLM



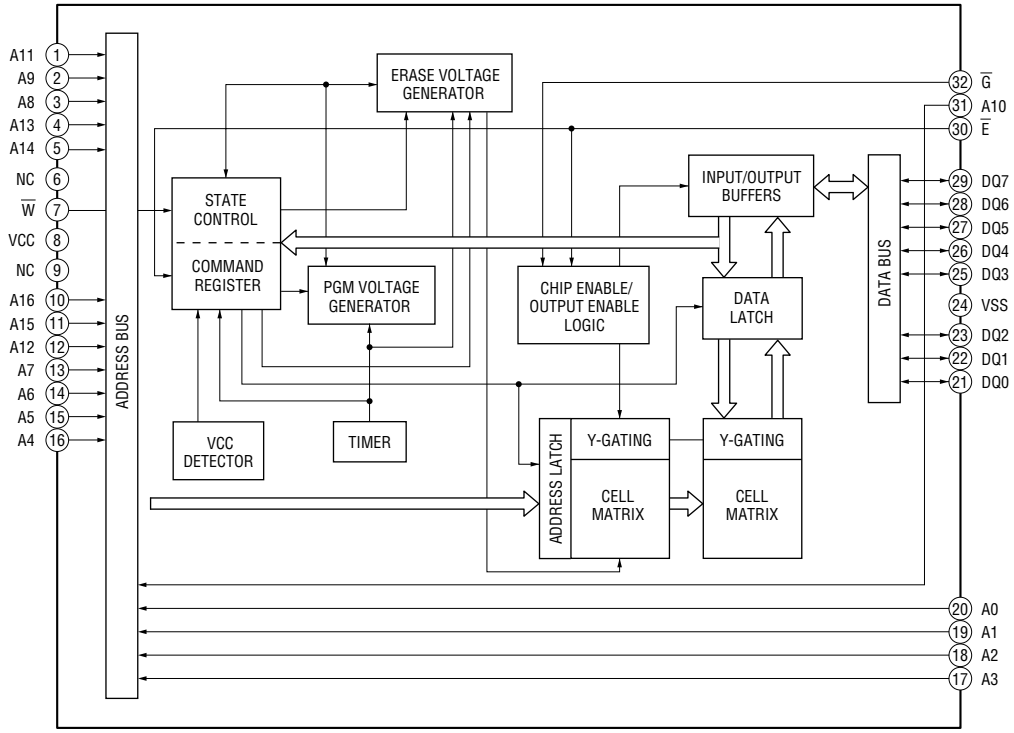
IC5 BD6609FV



IC6 BA5918FP-Y

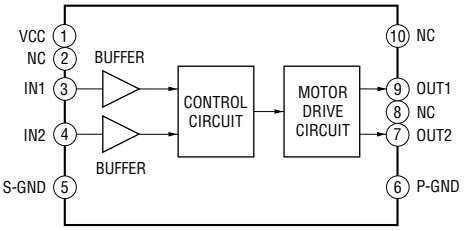


IC9 NX29F010-70T-550D02

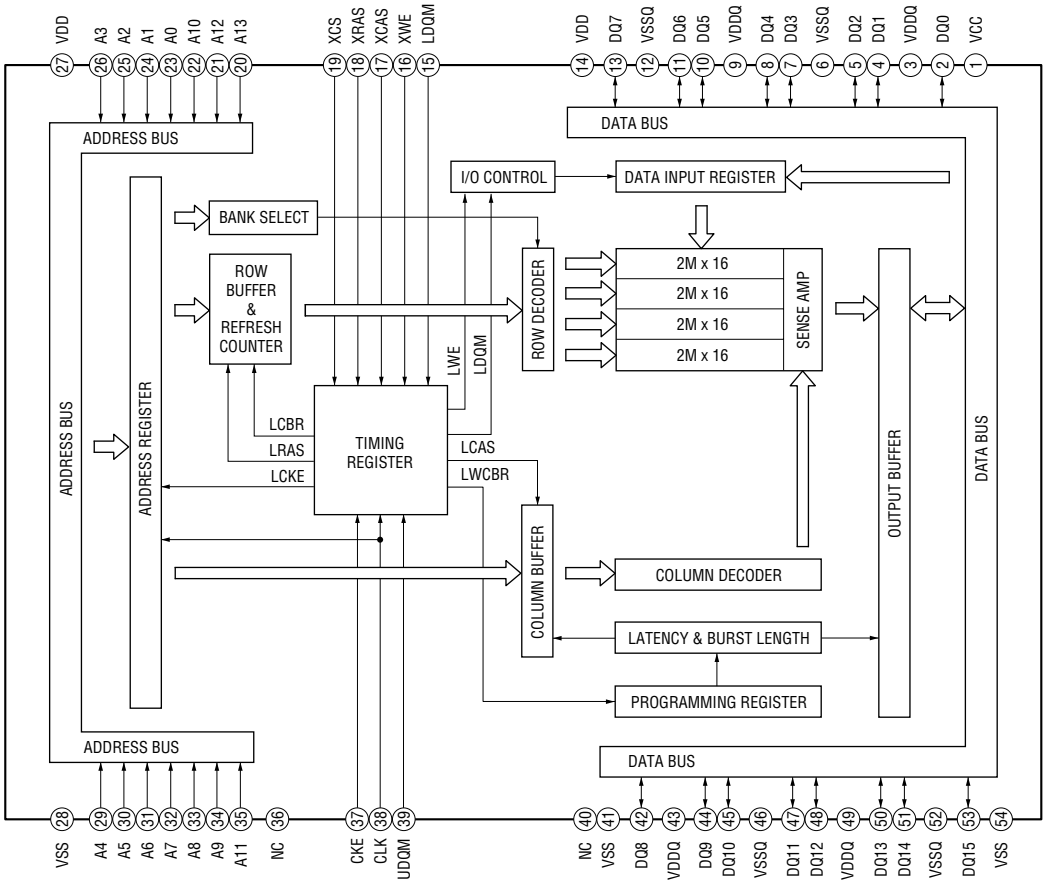


– MAIN Board –

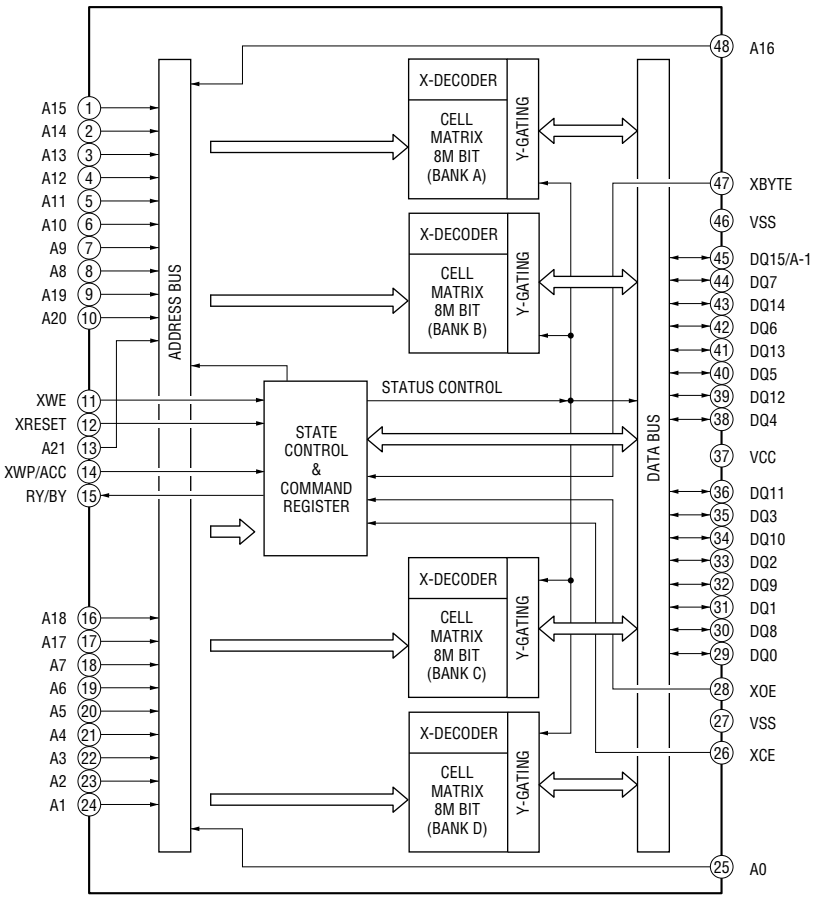
IC411 LB1930M-TLM



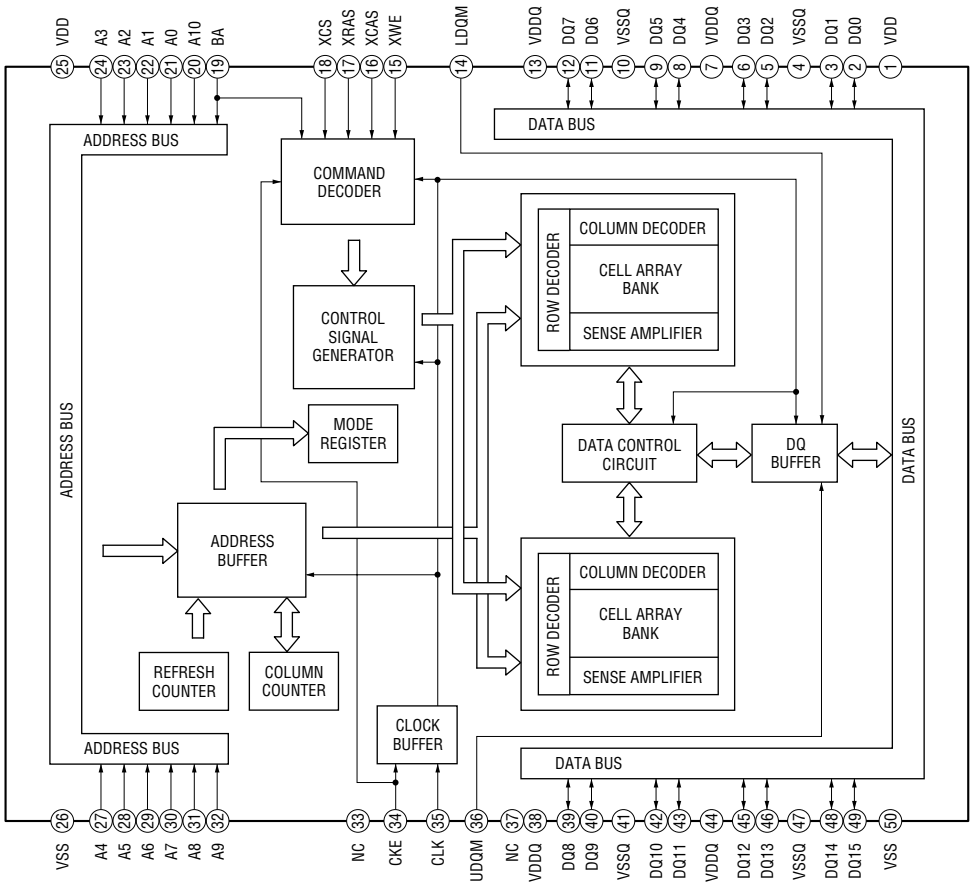
IC1020 K4S281632D-TI75



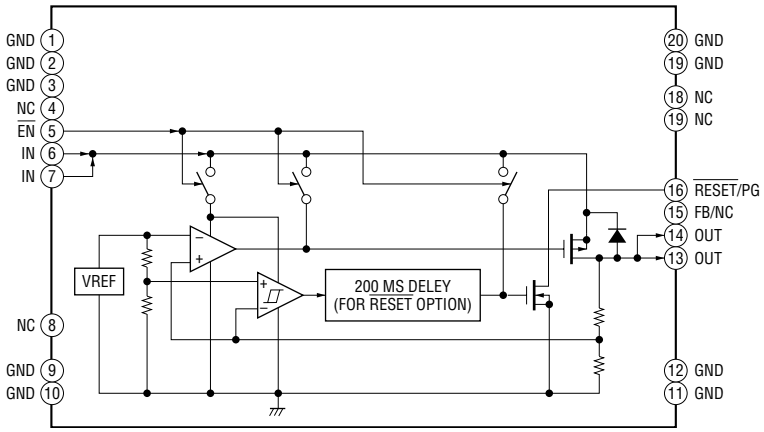
IC1030 MBM29DL640E-90TN-1HDU



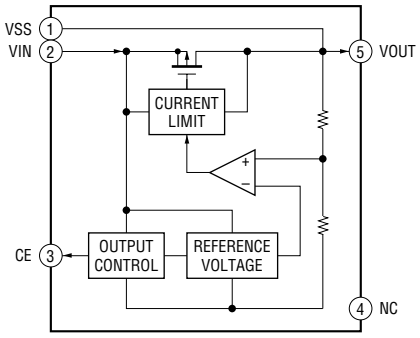
IC2001 W981616BH-7-EL10


VDD A3 A2 A1 A0 A10 BA XCS XRAS XCAS XWE LDQM VDDQ DQ7 DQ6 VSSQ DQ5 DQ4 VDDQ DQ3 DQ2 VSSQ DQ1 DQ0 VDD
25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
ADDRESS BUS
DATA BUS
COMMAND DECODER
CONTROL SIGNAL GENERATOR
MODE REGISTER
ROW DECODER
COLUMN DECODER
CELL ARRAY BANK
SENSE AMPLIFIER
DATA CONTROL CIRCUIT
DQ BUFFER
ADDRESS BUFFER
REFRESH COUNTER
COLUMN COUNTER
CLOCK BUFFER
VSS A4 A5 A6 A7 A8 A9 NC CKE CLK UDQM NC VDDQ DQ8 DQ9 VSSQ DQ10 DQ11 VDDQ DQ12 DQ13 VSSQ DQ14 DQ15 VSS
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

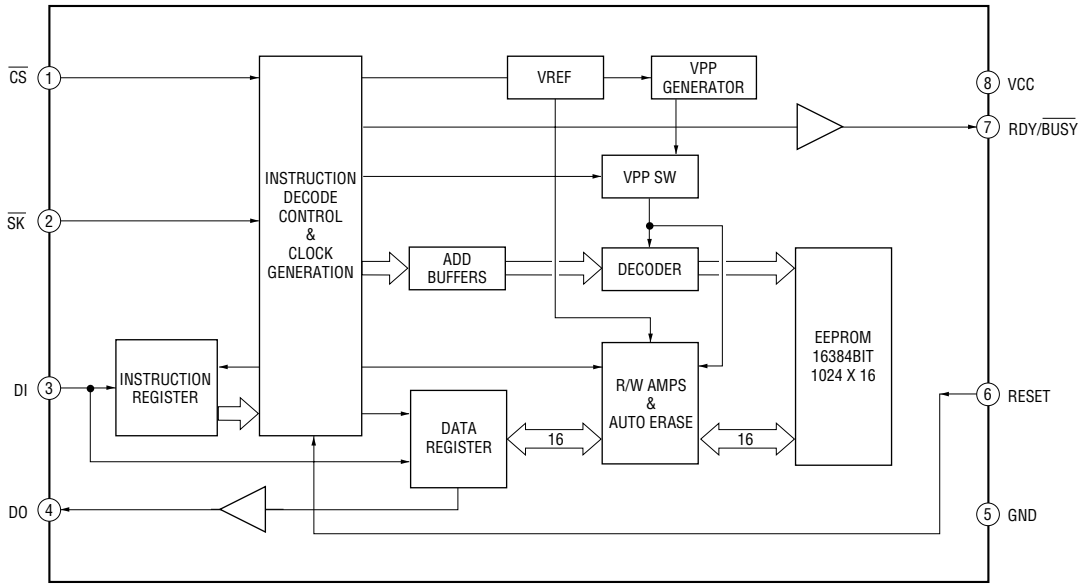
IC3001 TPS77818PWPR



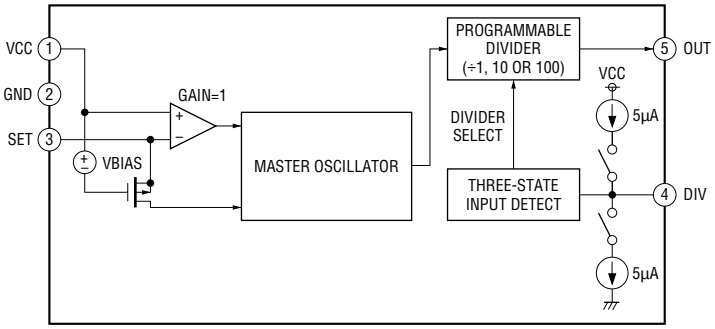
IC3005 XC62GR3312MR



IC4002 CXK2000EN-T2

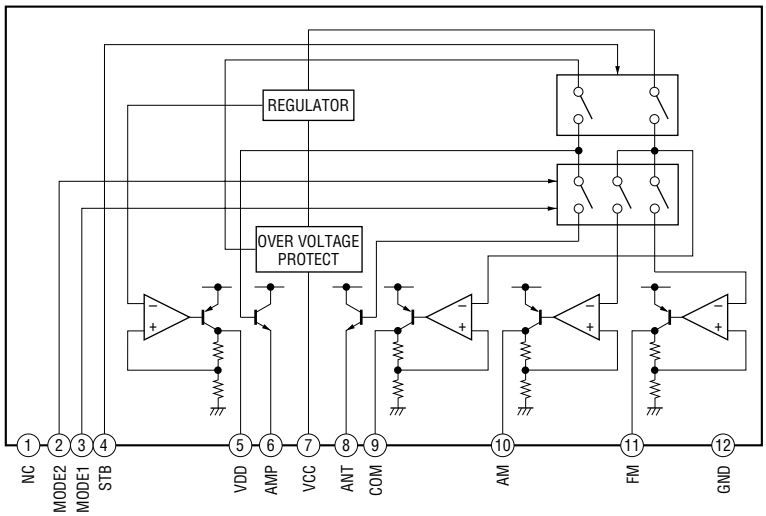


IC5002 LTC1799CS5#TR

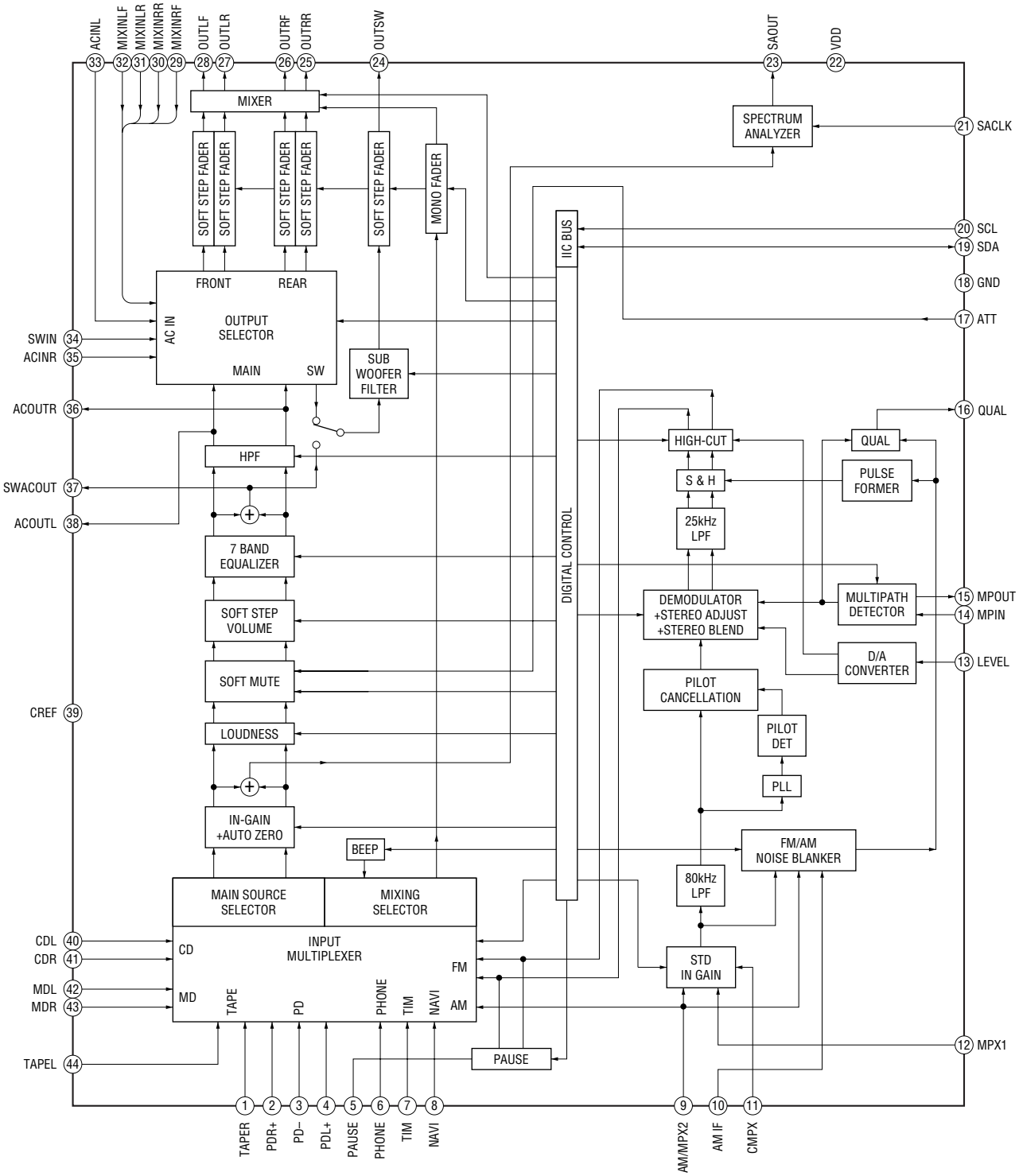


– SUB Board –

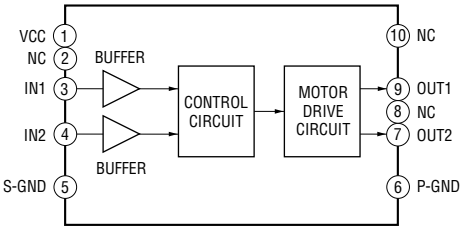
IC201 BA3918-V2



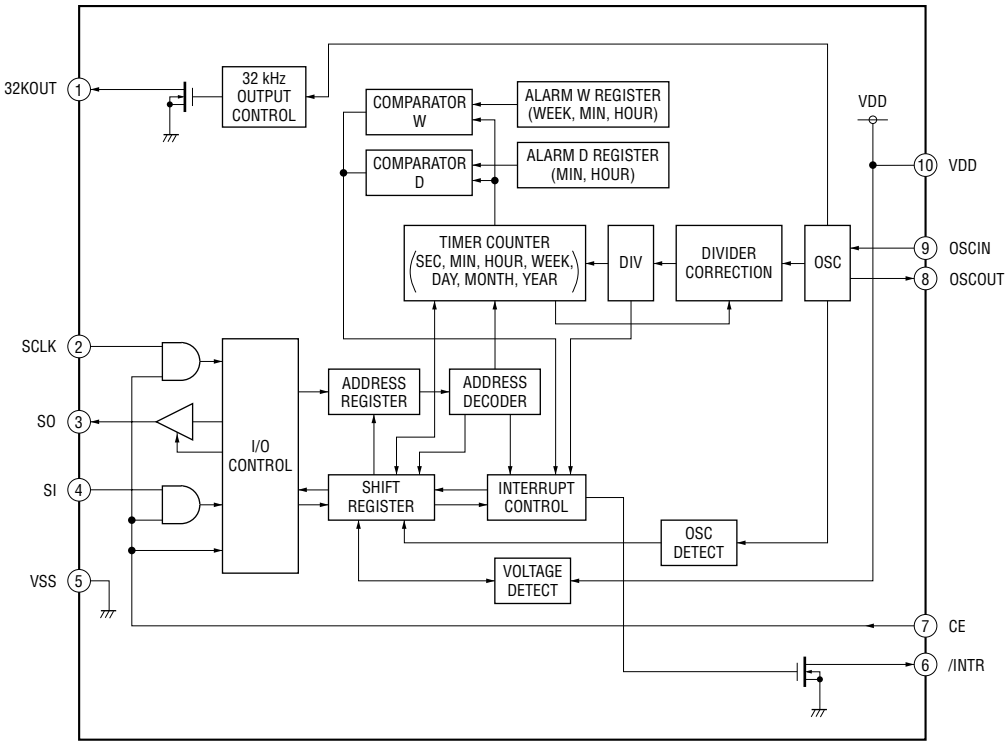
IC301 TDA7406



IC411 LB1930M-TLM

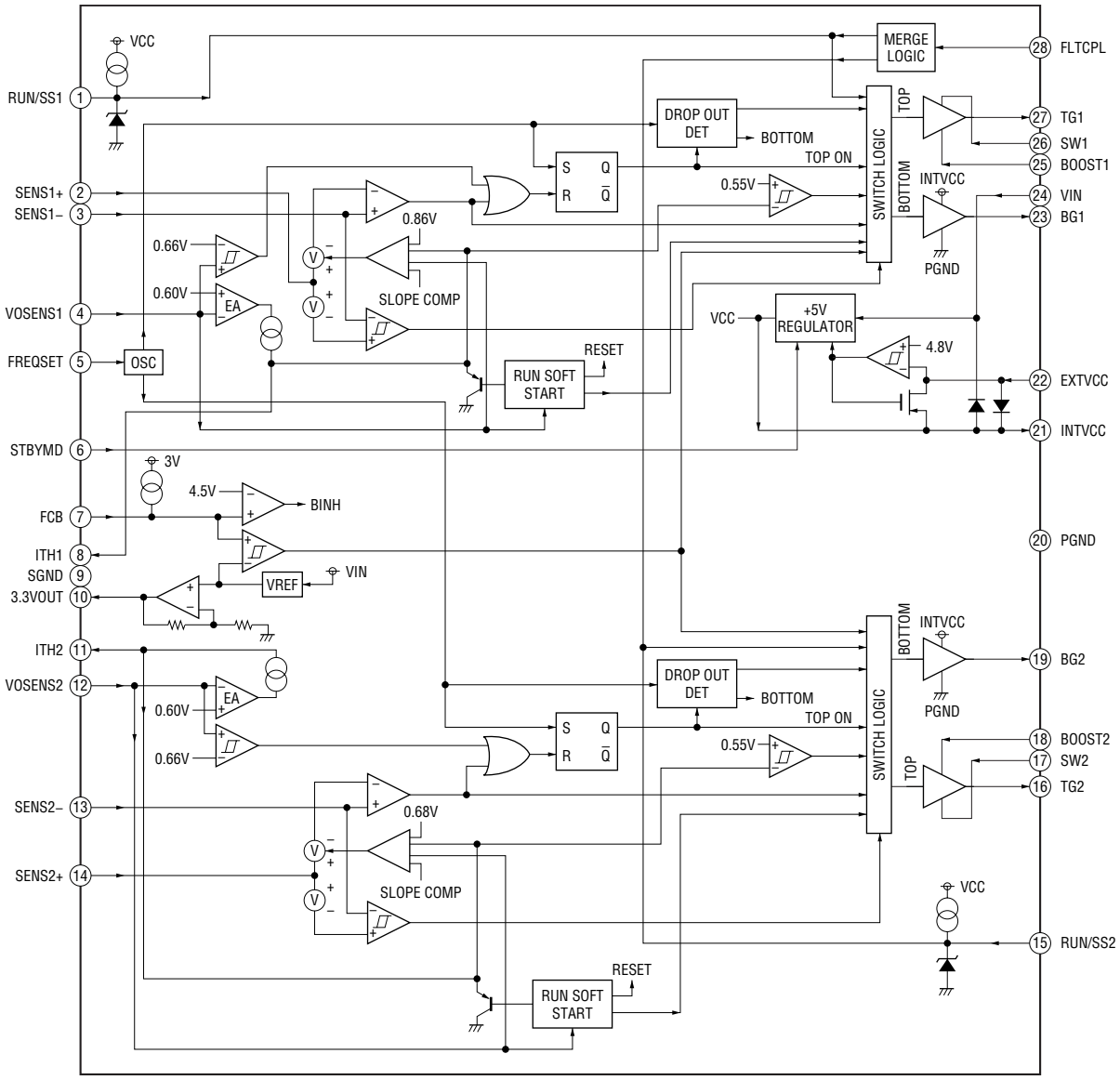


IC502 RS5C348A-E2

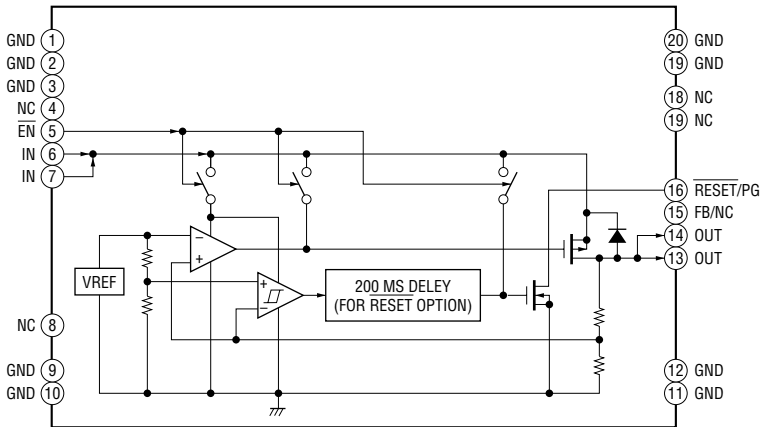


– POWER Board –

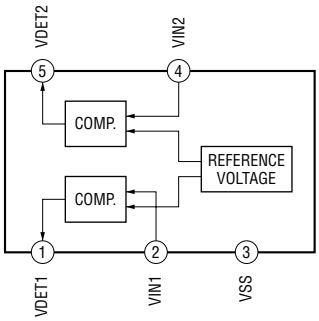
IC701 LTC1628CG#TR



IC702 TPS77601PWPR

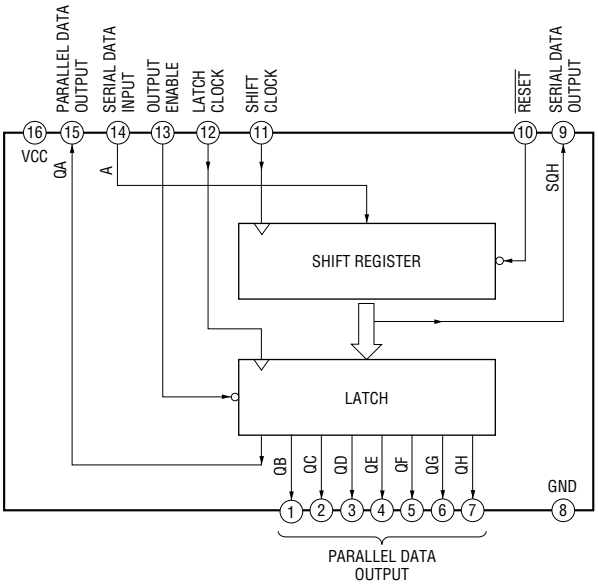


IC707 XC612N4644MR
IC708 XC612N3129MR
IC709 XC612N2016MR
IC713 XC612N1917MR

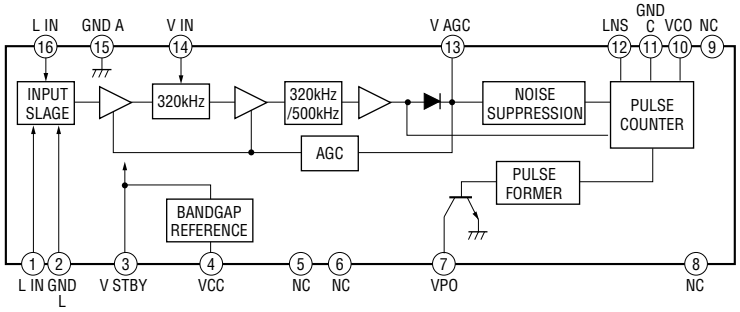


– DISPLAY Board –

IC901 SN74HC595ADBR



IC902 RRX900-0601#1



6-33. IC PIN FUNCTION DESCRIPTION

• SERVO BOARD IC8 LC895300 (ATAPI, DSP, CD-ROM DECODER)

Pin No.	Pin Name	I/O	Description
1	VSS	—	Ground terminal
2 to 4	A11, A9, A8	O	Address signal output to the flash memory
5, 6	A13, A14	O	Address signal output to the flash memory
7	WSTROBE	O	Write strobe signal output to the flash memory
8 to 10	A16, A15, A12	O	Address signal output to the flash memory
11 to18	A7 to A0	O	Address signal output to the flash memory
19, 20	DATA0, DATA1	I/O	Two-way data bus with the flash memory
21	VDDD	—	Power supply terminal (+5V)
22	VDD1	—	Power supply terminal (+3.3V)
23	VSS	—	Ground terminal
24	VSSD	—	Ground terminal
25 to 30	DATA2 to DATA7	I/O	Two-way data bus with the flash memory
31	ZCE	O	Chip enable signal output to the flash memory
32	A10	O	Address signal output to the flash memory
33	PSEN	O	Ready signal output to the flash memory
34	IOPORT0	I/O	Not used
35	IOPORT1	I	Tray close-end signal input
36	IOPORT2	I/O	Not used
37	TEST0	I	For test terminal (normally: fixed at “L”)
38	WRQ/HFLO/DIR /TLOCK	O	Monitor output terminal Not used
39	FSEQ/DEF	O	Frame detection signal output or defect signal output terminal Not used
40	DOUT/TESO	O	Digital audio signal output or TES signal output terminal Not used
41	VDD0	—	Power supply terminal (+5V)
42	VSS	—	Ground terminal
43	PLL1	O	PLL clock signal output terminal Not used
44	PLL1VDD	—	Power supply terminal (+3.3V)
45	PLL1VSS	—	Ground terminal
46	CSEL	I	Not used
47	ZHRST	I	Not used
48	ZDASP	I/O	Not used
49, 50	ZCS3FX, ZCS1FX	I	ATAPI bus chip select signal input from the CPU/ATA interface IC
51	VSS1	—	Ground terminal
52	VDD0	—	Power supply terminal (+5V)
53, 54	DA2, DA0	I	ATAPI bus address signal input from the CPU/ATA interface IC
55	ZPDIAG	I/O	Not used
56	DA1	I	ATAPI bus address signal input from the CPU/ATA interface IC
57	ZIOCS16	O	Chip select signal output terminal Not used
58	VSS1	—	Ground terminal
59	HINTRQ	O	Interrupt request signal output to the CPU/ATA interface IC
60	ZDMACK	I	ATAPI bus DMA acknowledge signal input from the CPU/ATA interface IC
61	IORDY	O	ATAPI bus ready signal output to the CPU/ATA interface IC
62	ZDIOR	I	ATAPI bus IOR signal input from the CPU/ATA interface IC
63	ZDIOW	I	ATAPI bus IOW signal input from the CPU/ATA interface IC
64	DMARQ	O	ATAPI bus DMA request signal output to the CPU/ATA interface IC

Pin No.	Pin Name	I/O	Description
65	VDD0	—	Power supply terminal (+5V)
66	VDD1	—	Power supply terminal (+3.3V)
67	VSS1	—	Ground terminal
68, 69	DD15, DD0	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
70, 71	DD14, DD1	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
72, 73	DD13, DD2	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
74, 75	DD12, DD3	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
76	VSS1	—	Ground terminal
77, 78	DD11, DD4	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
79, 80	DD10, DD5	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
81, 82	DD9, DD6	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
93, 84	DD8, DD7	I/O	ATAPI two-way data bus with the CPU/ATA interface IC and HDD
85	VDD0	—	Power supply terminal (+5V)
86	TEST1	I	For test terminal (normally: fixed at “L”)
87	ROUT	O	Audio signal output terminal (R-ch) Not used
88	AUVDD	—	Power supply terminal (+5V)
89	AUVSS	—	Ground terminal
90	LOUT	O	Audio signal output terminal (L-ch) Not used
91	VSS	—	Ground terminal
92	XTALCK	I	System clock input terminal (33.8688 MHz)
93	XTAL	O	System clock output terminal (33.8688 MHz)
94	VDD0	—	Power supply terminal (+5V)
95	FSX/LRCK	O	Not used
96	EFLG/CK2	O	Not used
97	TRV2/DATA	I/O	Not used
98	TRV	I/O	Not used
99	FLOCK/ CRCERRC2F/PCK	O	FLOCK/CRCERRC2F/PCK signal output terminal Not used
100	EFMOUT	O	EFM signal output terminal Not used
101	OUTPORT	O	Not used
102	SW1	I	Tray close detection input terminal Not used
103	SW2	I	Tray open detection input terminal Not used
104	SW3	I	Detection signal input for an eject key Not used
105 to 107	IOPORT3 to IOPORT5	I/O	Not used
108	IOPORT6	O	Standby signal output to the BA5918FP
109	VSSD	—	Ground terminal
110	VDD1	—	Power supply terminal (+3.3V)
111	VSS	—	Ground terminal
112	VDDD	—	Power supply terminal (+5V)
113	IOPORT7	O	Brake signal output to the spindle motor driver
114, 115	IOPORT8, IOPORT9	I/O	Not used
116	DSLB	O	PWM signal output for slice level
117	AVDD	—	Power supply terminal (+3.3V)
118, 119	SLCIST1, SLCIST2	I	EFM slice level setting terminal

Pin No.	Pin Name	I/O	Description
120 to 123	SLCO0 to SLCO3	O	EFM slice level signal output terminal
124	EFMIN	I	EFM signal input from the RF amp
125	EFMIN2	I	EFM signal input from the RF amp
126	AVSS	—	Ground terminal
127	JITC	O	Jitter output terminal
128	PWM0	O	PWM signal output for VCO Not used
129	FR	I	VCO frequency setting terminal
130	PCKISTF	I	Charge pump setting terminal for frequency comparison
131	PCKISTP	I	Charge pump setting terminal for phase comparison
132	PLL2VDD	—	Power supply terminal (+3.3V)
133	PLL2VSS	—	Ground terminal
134	PD0	O	Charge pump filter output terminal
135 to 137	PDS1 to PDS3	O	Charge pump selection output terminal
138	RPO	O	P/N balance adjustment terminal
139	SVSS	—	Ground terminal
140	AD1	I	Focus error signal input from the RF amp
141	PH	I	Light amount signal (RF/ABCD) peak hold signal input from the RF amp
142	BH	I	Light amount signal (RF/ABCD) bottom hold signal input from the RF amp
143	RREC	I	Reflection signal input from the RF amp
144	FE	I	Focus error signal input from the RF amp
145	TE	I	Tracking error signal input from the RF amp
146	TES	I	TES signal input from the RF amp
147	VREF	I	Reference voltage input terminal
148	PHC	O	Connected to the external capacitor for peak hold slice
149	BHC	O	Connected to the external capacitor for bottom hold slice
150	FBAL	O	Focus balance adjustment signal output to the RF amp
151	TBAL	O	Tracking balance adjustment signal output to the RF amp
152	SGC	O	Servo gain adjustment signal output to the RF amp
153	TOFST	O	Tracking offset adjustment signal output
154	SVDD	—	Power supply terminal (+5V)
155	SVSS	—	Ground terminal
156	TDO	O	Tracking servo drive signal output to the BA5918FP
157	FDO	O	Focus servo drive signal output to the BA5918FP
158	SLDO	O	Sled servo drive signal output to the BA5918FP
159	SPDO	O	Spindle servo drive signal output to the BA5918FP
160	VDD0	—	Power supply terminal (+5V)
161	VSS	—	Ground terminal
162	VDD1	—	Power supply terminal (+3.3V)
163	RHLD	O	Automatic gain control hold signal output to the RF amp
164	TSH	O	TS frequency control signal output to the RF amp
165	EQS	O	RF equalizer selection signal output to the RF amp
166	GHS	O	RF and servo gain control signal output to the RF amp
167	LDON	O	Laser diode on/off control signal output to the RF amp
168	TEST2	I	For test terminal (normally: fixed at “L”)
169	FG	I	FG signal input from the spindle motor driver
170	IOPORT10	O	Standby signal output to the spindle motor driver

Pin No.	Pin Name	I/O	Description
171	IOPORT11	O	Phase control signal output to the spindle motor driver
172	IOPORT12	I/O	Not used
173	IOPORT13 (DSP_RX)	I/O	Not used
174	IOPORT14 (DSP_TX)	I/O	Not used
175	ZRESET	I	Reset signal input from the reset signal generator or CPU
176	VDD0	—	Power supply terminal (+3.3V)

• **MAIN BOARD IC1010 HD6417709AF133 (CPU)**

Pin No.	Pin Name	I/O	Description
1, 2	MD1, MD2	I	Clock mode selection input terminal
3	VCC_RTC	—	Power supply terminal (+1.9V)
4	NC	O	Sub system clock output terminal (32.768kHz) (for the internal real time clock) Not used
5	EXTAL2	I	Sub system clock input terminal (32.768kHz) (for the internal real time clock) Not used
6	VSS_RTC	—	Ground terminal
7	NMI	I	Non-maskable interrupt input terminal Not used
8 to 11	XIRL0 to XIRL3	I	Interrupt request signal input from the CPU/ATA interface IC
12	IRQ4	I	Interrupt request signal input terminal Not used
13 to 18	BB_LED7 to BB_LED2	O	Not used
19	DGND	—	Ground terminal
20	BB_LED1	O	Not used
21	D3.3V	—	Power supply terminal (+3.3V)
22	BB_LED0	O	Not used
23 to 25	NC	O	Not used
26	FLD_ON	O	Fluorescent indicator tube driver power supply on/off control signal output terminal “H”: fluorescent indicator tube on
27	DGND	—	Ground terminal
28	FL_ON	O	Fluorescent indicator tube power supply on/off control signal output terminal “H”: fluorescent indicator tube on
29	D1.9V	—	Power supply terminal (+1.9V)
30	ILL_ON	O	Power supply on/off control signal output at the illumination “H”: illumination on
31	USB_ACS_LED	O	LED drive signal output terminal
32	MS_ACS_LED	O	LED drive signal output terminal
33	DGND	—	Ground terminal
34	SH_D15	I/O	Two-way data bus with the CPU/ATA interface IC, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
35	D3.3V	—	Power supply terminal (+3.3V)
36 to 44	SH_D14 to SH_D6	I/O	Two-way data bus with the CPU/ATA interface IC, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
45	DGND	—	Ground terminal
46	SH_D5	I/O	Two-way data bus with the CPU/ATA interface IC, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
47	D3.3V	—	Power supply terminal (+3.3V)
48 to 52	SH_D4 to SH_D0	I/O	Two-way data bus with the CPU/ATA interface IC, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
53	SH_A0	O	Address signal output terminal Not used
54, 55	SH_A1, SD_A2	O	Two-way data bus with the CPU/ATA interface IC, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
56	SH_A3	O	Address signal output to the CPU/ATA interface IC, memory stick interface IC, 64MB flash memory and 128MB SD-RAM
57	DGND	—	Ground terminal
58	SH_A4	O	Address signal output to the CPU/ATA interface IC, memory stick interface IC, 64MB flash memory and 128MB SD-RAM
59	D3.3V	—	Power supply terminal (+3.3V)
60 to 68	SH_A5 to SH_A13	O	Address signal output to the CPU/ATA interface IC, memory stick interface IC, 64MB flash memory and 128MB SD-RAM
69	DGND	—	Ground terminal

Pin No.	Pin Name	I/O	Description
70	SH_A14	O	Address signal output to the CPU/ATA interface IC, memory stick interface IC, 64MB flash memory and 128MB SD-RAM
71	D3.3V	—	Power supply terminal (+3.3V)
72	SH_A15	O	Address signal output to the CPU/ATA interface IC, memory stick interface IC and 64MB flash memory
73 to 77	SH_A16 to SH_A20	O	Address signal output to the CPU/ATA interface IC and 64MB flash memory
78	SH_A21	O	Address signal output to the 64MB flash memory
79	DGND	—	Ground terminal
80	SH_A22	O	Address signal output to the 64MB flash memory
81	D1.9V	—	Power supply terminal (+1.9V)
82	SH_A23	O	Address signal output to the CPU/ATA interface IC
83	DGND	—	Ground terminal
84	SH_A24	O	Address signal output to the CPU/ATA interface IC
85	D3.3V	—	Power supply terminal (+3.3V)
86	SH_A25	O	Address signal output to the CPU/ATA interface IC
87	XBS	O	Bus start signal output to the CPU/ATA interface IC
88	XRD	O	Read strobe signal output to the CPU/ATA interface IC, memory stick interface IC, USB interface IC and 64MB flash memory
89	XWE0/DQMLL	O	Write enable signal output to the CPU/ATA interface IC, memory stick interface IC, USB interface IC, display controller and 128MB SD-RAM
90	XWE1/DQMLU	O	Write enable signal output to the CPU/ATA interface IC, memory stick interface IC, and 128MB SD-RAM
91	XWE2/DQMUL	O	Write enable signal output terminal Not used
92	XWE3/DQMUU	O	Write enable signal output terminal Not used
93	RDXWR	O	Read/write signal output to the CPU/ATA interface IC, 64MB flash memory and 128MB SD-RAM
94	XAUDSYNC	O	Not used
95	DGND	—	Ground terminal
96	XCS0	O	Chip select signal output to the 64MB flash memory
97	D3.3V	—	Power supply terminal (+3.3V)
98	XCS2	O	Chip select signal output to the USB interface IC
99	XCS3	O	Chip select signal output to the 128MB SD-RAM
100	XCS4	O	Chip select signal output to the CPU/ATA interface IC
101	XCS5	O	Chip select signal output to the memory stick interface IC
102	XCS6	O	Chip select signal output to the display controller
103	NC	O	Not used
104	XCE2B	O	Not used
105	CKE	O	Clock enable signal output to the 128M SD-RAM
106	XRAS3	O	Row address strobe signal output to the 128M SD-RAM
107	NC	O	Not used
108	CASL	O	Column address strobe signal output to the 128M SD-RAM
109	DGND	—	Ground terminal
110	CASU	O	Column address strobe signal output terminal Not used
111	D3.3V	—	Power supply terminal (+3.3V)
112, 113	NC	O	Not used
114	XDACK0	O	Acknowledge signal output to the USB interface IC
115	XDACK1	O	Acknowledge signal output to the display controller
116, 117	NC	O	Not used

Pin No.	Pin Name	I/O	Description
118	XRAS3U	O	Row address strobe signal output terminal Not used
119	NC	O	Not used
120	TDO	O	Serial data output terminal Not used
121	NC	O	Acknowledge signal output terminal Not used
122	XBREQ	I	Not used
123	XWAIT	I	Wait signal input from the CPU/ATA interface IC
124	RESET	I	Manual reset signal input terminal Not used
125	RE_LA	I	Rotary encoder dial pulse input terminal (Left/A phase input) Not used
126	XTMODE	I	Not used
127	XASEMDO	—	Not used
128	XASEBRKAK	—	Not used
129	DIAG	I	Not used
130	AUDATA3	I	Not used
131	AUDATA2	I	Not used
132	DGND	—	Ground terminal
133	AUDATA1	I	Not used
134	D1.9V	—	Power supply terminal (+1.9V)
135	AUDATA0	I	Not used
136	XTRST	I	Not used
137	TMS	I	Not used
138	TDI	I	Not used
139	TCK	I	Not used
140	RE_RA	I	Rotary encoder dial pulse input terminal (Right/A phase input) Not used
141	RE_RB	I	Rotary encoder dial pulse input terminal (Right/B phase input) Not used
142	DON'T USE0	—	Not used
143	DON'T USE1	—	Not used
144	MD0	I	Clock mode selection input terminal
145	D1.9V	—	Power supply terminal (+1.9V)
146	CAP1	—	Connected to the external capacitor for PLL2
147, 148	DGND	—	Ground terminal
149	CAP2	—	Connected to the external capacitor for PLL2
150	D1.9V	—	Power supply terminal (+1.9V)
151	AUDCK	O	Not used
152, 153	DGND	—	Ground terminal
154	D1.9V	—	Power supply terminal (+1.9V)
155	XTAL	O	Main system clock output terminal (33.3333MHz) Not used
156	EXTAL	I	Main system clock input terminal (33.3333MHz)
157, 158	NC	O	Not used
159	SA_CLK	O	Spectrum analyze data transfer clock signal output to the electrical volume
160	NC	O	Not used
161	DGND	—	Ground terminal
162	CKIO	O	System clock signal output to the CPU/ATA interface IC, complex programmable logic device and 128MB SD-RAM
163	D3.3V	—	Power supply terminal (+3.3V)
164, 165	NC	O	Not used
166	TXD	O	Not used
167	NC	O	Not used
168	SUB_RXD	O	UART receive data output to the system controller “L” active
169, 170	NC	O	Not used

Pin No.	Pin Name	I/O	Description
171, 172	RXD0, RXD2	I	Not used
173	DGND	—	Ground terminal
174	SUB_TXD	I	UART transmit data input from the system controller “L” active
175	D1.9V	—	Power supply terminal (+1.9V)
176 to 178	NC	—	Not used
179	XIDE_RST	O	Reset signal output terminal for the CD DSP “L” reset
180	MS_PWR	O	Memory stick power supply on/off control signal output terminal “H”: memory stick power on
181	DGND	—	Ground terminal
182	NC	O	Not used
183	D3.3V	—	Power supply terminal (+3.3V)
184	NC	O	Not used
185	XUSB_RST	O	Reset signal output for the USB interface IC “L” reset
186	XHB_RST	O	Reset signal output for the DSP “L” reset
187	XHB_RST	O	Reset signal output for the memory stick interface IC “L” reset
188	SH_WDT	O	Watch dog timer detection signal output to the system controller
189	XFAIL	O	Rewriting failure detection terminal “L” rewriting failure Not used
190	D_MUTING	O	Muting on/off control signal output “L”: muting on
191	XDREQ0	I	DMA request signal input from the USB interface IC
192	XDREQ1	I	DMA request signal input from the display controller
193	XRST_SYS	I	System reset signal input from the system controller
194	CA	I	Chip active signal input terminal
195 to 197	MD3 to MD5	I	Clock mode selection input terminal
198	DGND	—	Ground terminal
199	USB_VCCD	I	Not used
200	SA_DATA	I	Spectrum analyze data input from the electrical volume
201	RE_LB	I	Rotary encoder dial pulse input terminal (left/B phase input) Not used
202 to 204	NC	I	Not used
205	D3.3V	—	Power supply terminal (+3.3V)
206, 207	NC	I	Not used
208	DGND	—	Ground terminal

• **MAIN BOARD IC2003 CXD9533Q (CPU/ATA INTERFACE)**

Pin No.	Pin Name	I/O	Description
1	VDD	—	Power supply terminal (+3.3V)
2, 3	SD_D03, SD_D04	I/O	Two-way data bus with the SD-RAM
4	VSS	—	Ground terminal
5, 6	SD_D05, SD_D06	I/O	Two-way data bus with the SD-RAM
7	VDD	—	Power supply terminal (+3.3V)
8, 9	SD_D07, SD_D08	I/O	Two-way data bus with the SD-RAM
10	VSS	—	Ground terminal
11 to 17	SD_D09 to SD_D15	I/O	Two-way data bus with the SD-RAM
18	SD_DQML	O	Write mask signal output to the SD-RAM (lower byte)
19	SD_DQMU	O	Write mask signal output to the SD-RAM (upper byte)
20	VDD	—	Power supply terminal (+3.3V)
21	SD_CLK	O	Clock signal output to the SD-RAM
22	VSS	—	Ground terminal
23	SD_XWE	O	Write enable signal output to the SD-RAM
24	SD_XCAS	O	Column address strobe signal output to the SD-RAM
25	SD_XRAS	O	Row address strobe signal output to the SD-RAM
26	SD_XCS1	O	Chip select signal output to the SD-RAM
27	VDD	—	Power supply terminal (+3.3V)
28, 29	SD_A11, SD_A10	O	Address signal output to the SD-RAM
31 to 33	SD_A09 to SD_A07	O	Address signal output to the SD-RAM
34	VDD	—	Power supply terminal (+3.3V)
35, 36	SD_A06, SD_A05	O	Address signal output to the SD-RAM
37	VSS	—	Ground terminal
38 to 42	SD_A04 to SD_A00	O	Address signal output to the SD-RAM
43 to 46	AV_HD00 to AV_HD03	I/O	Two-way AV data bus with the DSP
47	VDD	—	Power supply terminal (+3.3V)
48, 49	AV_HD05, AV_HD06	I/O	Two-way AV data bus with the DSP
50	VSS	—	Ground terminal
51 to 54	AV_HD06 to AV_HD09	I/O	Two-way AV data bus with the DSP
55	VDD	—	Power supply terminal (+3.3V)
56, 57	AV_HD10, AV_HD11	I/O	Two-way AV data bus with the DSP
58	VSS	—	Ground terminal
59 to 62	AV_HD12 to AV_HD15	I/O	Two-way AV data bus with the DSP
63	AV_BEND0	O	AV bus block data transfer completely signal output terminal Not used
64 to 66	AV_BEND1 to AV_BEND3	O	AV bus block data transfer completely signal output to the DSP
67	XAV_DRQ0	I	AV bus data request signal input terminal Not used
68 to 70	XAV_DRQ1 to XAV_DRQ3	I	AV bus data request signal input from the DSP

Pin No.	Pin Name	I/O	Description
71	VDD	—	Power supply terminal (+3.3V)
72	XAV_HRDY	I	AV bus ready signal input from the XC9536XL
73	VSS	—	Ground terminal
74	XAV_HDS	O	AV bus data strobe signal output to the XC9536XL
75 to 77	AV_HA1 to AV_HA3	O	AV bus address signal output to the DSP
78	AV_HRXW	O	AV bus read or write enable signal output to the DSP
79	XAV_HCS0	O	AV bus chip select signal output to the XC9536XL
80	XAV_HCS1	O	Chip select signal output terminal
81	AV_CMD	O	AV bus command-set signal output to the DSP
82	VDD	—	Power supply terminal (+3.3V)
83	XAV_HINT0	I	AV bus interrupt request signal input from the DSP
84	XAV_HINT1	I	Interrupt request signal input terminal Not used
85, 86	VSS	—	Ground terminal
87, 88	ID_DD00, ID_DD01	I/O	ATAPI two-way data bus with the LC895300 and HDD
89	VCC	—	Power supply terminal (+5V)
90 to 92	ID_DD02 to ID_DD04	I/O	ATAPI two-way data bus with the LC895300 and HDD
93	VSS	—	Ground terminal
94, 95	ID_DD05, ID_DD06	I/O	ATAPI two-way data bus with the LC895300 and HDD
96	VDD	—	Power supply terminal (+3.3V)
97 to 99	ID_DD07 to ID_DD09	I/O	ATAPI two-way data bus with the LC895300 and HDD
100	VSS	—	Ground terminal
101, 102	ID_DD10, ID_DD11	I/O	ATAPI two-way data bus with the LC895300 and HDD
103	VCC	—	Power supply terminal (+3.3V)
104, 105	ID_DD12, ID_DD13	I/O	ATAPI two-way data bus with the LC895300 and HDD
106	VCC	—	Power supply terminal (+3.3V)
107, 108	ID_DD14, ID_DD15	I/O	ATAPI two-way data bus with the LC895300 and HDD
109	VSS	—	Ground terminal
110 to 112	ID_DA0 to ID/DA2	O	ATAPI bus address signal output to the LC895300 and HDD
113	ID0_INTR	I	ATAPI bus interrupt request signal input from the HDD
114	VCC	—	Power supply terminal (+5V)
115	ID1_INTR	I	ATAPI bus interrupt request signal input from the LC895300
116	ID0_XDMAK	O	ATAPI bus DMA acknowledge signal output to the HDD
117	ID1_XDMAK	O	ATAPI bus DMA acknowledge signal output to the LC895300
118	ID0_XCS0	O	ATAPI bus chip select signal output to the HDD
119	ID0_XCS1	O	ATAPI bus chip select signal output to the HDD
120	ID0_DMRQ	I	ATAPI bus DMA request signal input from the HDD
121	VSS	—	Ground terminal
122	ID1_DMRQ	I	ATAPI bus DMA request signal input from the LC895300

Pin No.	Pin Name	I/O	Description
123	ID_IORDY	I	ATAPI bus ready signal input from the LC895300 and HDD
124	ID_XDIOR	O	ATAPI bus IOR signal output to the LC895300 and HDD
125	ID_XDIOW	O	ATAPI bus IOW signal output to the LC895300 and HDD
126	VCC	—	Power supply terminal (+5V)
127, 128	ID1_XCS0, ID1_XCS1	O	ATAPI bus chip select signal output to the LC895300
129, 130	VSS	—	Ground terminal
131, 132	T, W	I	For test terminal (normally: fixed at “L”)
133	VDD	—	Power supply terminal (+3.3V)
134	CU_RXCLK	I	Cuckoo I/F RX data receive clock signal input terminal Not used
135	CU_RXDAT	I	Cuckoo I/F RX data input terminal Not used
136	CU_STRDI	I	Cuckoo I/F strobe/ready signal input terminal Not used
137	CU_CONH	I	Cuckoo I/F monitor signal input terminal Not used
138	CU_STRD0	O	Cuckoo I/F strobe/ready signal output terminal Not used
139	CU_TXDAT	O	Cuckoo I/F TX data output terminal Not used
140	CU_TXCLK	O	Cuckoo I/F TX data transfer clock signal output terminal Not used
141	VSS	—	Ground terminal
142	CU_TXOSC	O	Cuckoo I/F TX data transfer clock source output terminal Not used
143	VDD	—	Power supply terminal (+3.3V)
144, 145	EX_XWAIT1, EX_XWAIT0	I	Wait signal input terminal Not used
146	EX_XIRQ0	I	Interrupt request signal input from the memory stick interface IC
147	EX_XIRQ1	I	Interrupt request signal input from the USB interface IC
148 to 151	SH_XIRL0 to SH_XIRL3	O	Interrupt request signal output to the CPU
152	SH_XWAIT	O	Wait signal output to the CPU
153	SH_XRST	I	System reset signal input from the system controller
154	SH_XRD	I	Read strobe signal input to the CPU
155	SH_XRDWR	I	Read/write signal input from the CPU
156 157	XWE0, SH_XWE1	I	Write enable signal input from the CPU
158	SH_XBS	I	Bus start signal input from the CPU
159	VSS	—	Ground terminal
160	SH_CKIO	I	System clock signal input from the CPU
161	VDD	—	Power supply terminal (+3.3V)
162	SH_XCS	I	Chip select signal input from the CPU
163 to 165	SH_A25 to SH_A23	I	Address signal input from the CPU
166 to 179	SH_A20 to SH_A07	I	Address signal input from the CPU
180	VSS	—	Ground terminal
181, 182	SH_A06, SHA05	I	Address signal input from the CPU
183	VDD	—	Power supply terminal (+3.3V)
184 to 187	SH_A04 to SH_A01	I	Address signal input from the CPU

Pin No.	Pin Name	I/O	Description
188 to 194	SH_D00 to SH_D06	I/O	Two-way data bus with the CPU, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
195	VSS	—	Ground terminal
196, 197	SH_D07, SH_D08	I/O	Two-way data bus with the CPU, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
198	VDD	—	Power supply terminal (+3.3V)
199 to 205	SH_D09 to SH_D15	I/O	Two-way data bus with the CPU, memory stick interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
206 to 208	SD_D00 to SD_D02	I/O	Two-way data bus with the SD-RAM

• **MAIN BOARD IC3000 XC9536XL-5VQ44C-HB01 (COMPLEX PROGRAMMABLE LOGIC DEVICE)**

Pin No.	Pin Name	I/O	Description
1 to 3	PGND	I/O	Not used
4	GND	—	Ground terminal
5	PRDY	O	AV bus ready signal output to the CPU/ATA interface IC
6	XPDS	I	AV bus data strobe signal input from the CPU/ATA interface IC
7	XPCS	I	AV bus chip select signal input from the CPU/ATA interface IC
8	PGND	I/O	Not used
9	TDI	I	Not used
10	TMS	I	Not used
11	TCK	I	Not used
12 to 14	PGND	I/O	Not used
15	VCC	—	Power supply terminal (+3.3V)
16	PGND	I/O	Not used
17	GND	—	Ground terminal
18 to 23	PGND	I/O	Not used
24	TDO	O	Not used
25	GND	—	Ground terminal
26	VCC	—	Power supply terminal (+3.3V)
27, 28	PGND	I/O	Not used
29	XHCS	O	AV bus chip select signal output to the DSP
30	XHDS	O	AV bus data strobe signal output to the DSP
31	XHRDY	I	AV bus ready signal input from the DSP
32	PGND	I/O	Not used
33	XRST	I	System reset signal input from the system controller
34	PGND	I/O	Not used
35	VCC	—	Power supply terminal (+3.3V)
36 to 42	PGND	I/O	Not used
43	CLK	I	System clock signal input terminal Not used
44	PGND	I	System clock signal input from the CPU

• **MAIN BOARD IC3003 TMS320C6211GFN167 (DSP)**

Pin No.	Pin Name	I/O	Description
1, 2	VSS	—	Ground terminal
3	CLKIN	I	System clock input terminal (37.5 MHz)
4	PLLV	—	Power supply terminal (+3.3V) (for PLL)
5	RSV2	O	Reserved terminal Not used
6	TCK	I	Clock signal input terminal (for test) Not used
7	TDI	I	Data input terminal (for test) Not used
8	TDO	O	Data output terminal (for test) Not used
9, 10	CVDD	—	Power supply terminal (+1.8V)
11	VSS	—	Ground terminal
12	CVDD	—	Power supply terminal (+1.8V)
13	XRESET	I	Reset signal input from the CPU
14	VSS	—	Ground terminal
15, 16	HD13, HD11	I/O	Two-way AV data bus with the CPU/ATA interface IC
17	DVDD	—	Power supply terminal (+3.3V)
18	HD7	I/O	Two-way AV data bus with the CPU/ATA interface IC
19 to 21	VSS	—	Ground terminal
22	CVDD	—	Power supply terminal (+1.8V)
23	DVDD	—	Power supply terminal (+3.3V)
24	VSS	—	Ground terminal
25	PLLF	—	PLL low-pass filter connection to external components and a bypass capacitor
26	XTRST	I	Reset signal input terminal Not used
27	TMS	I	Mode select terminal (for test) Not used
28	DVDD	—	Power supply terminal (+3.3V)
29, 30	EMU1, EMU3	I/O	Emulation terminal Not used
31	VSS	—	Ground terminal
32	EMU5	I/O	Emulation terminal Not used
33	DVDD	—	Power supply terminal (+3.3V)
34	HD15	I/O	Two-way AV data bus with the CPU/ATA interface IC
35	VSS	—	Ground terminal
36 to 38	HD10, HD8, HD5	I/O	Two-way AV data bus with the CPU/ATA interface IC
39	CVDD	—	Power supply terminal (+1.8V)
40	VSS	—	Ground terminal
41	EXT_INT5	I	AV bus block data transfer completely signal input from the CPU/ATA interface IC
42	EXT_INT4	I	AV bus command-set signal input from the CPU/ATA interface IC
43	CVDD	—	Power supply terminal (+1.8V)
44	CLKMODE0	I	Clock mode setting terminal Fixed at “L” in this set
45	DVDD	—	Power supply terminal (+3.3V)
46	PLLG	—	PLL analog GND connection for the low-pass filter
47	CVDD	—	Power supply terminal (+1.8V)
48, 49	VSS	—	Ground terminal
50	DVDD	—	Power supply terminal (+3.3V)
51	EMU4	I/O	Emulation terminal Not used
52	RSV0	O	Reserved terminal Not used
53	NMI	I	Non-maskable interrupt input Fixed at “H” in this set
54, 55	HD14, HD12	I/O	Two-way AV data bus with the CPU/ATA interface IC

Pin No.	Pin Name	I/O	Description
56, 57	HD9, HD6	I/O	Two-way AV data bus with the CPU/ATA interface IC
58	CVDD	—	Power supply terminal (+1.8V)
59, 60	HD4, HD3	I/O	Two-way AV data bus with the CPU/ATA interface IC
61	DVDD	—	Power supply terminal (+3.3V)
62	EXT_INT6	I	AV bus block data transfer completely signal input from the CPU/ATA interface IC
63	RSV3	O	Reserved terminal Not used
64	VSS	—	Ground terminal
65, 66	CVDD	—	Power supply terminal (+1.8V)
67	CLKOUT1	O	Clock signal output terminal Not used
68	VSS	—	Ground terminal
69, 70	EMU0, EMU2	I/O	Emulation terminal Not used
71	CVDD	—	Power supply terminal (+1.8V)
72	RSV1	O	Reserved terminal Not used
73	VSS	—	Ground terminal
74, 75	CVDD	—	Power supply terminal (+1.8V)
76	DVDD	—	Power supply terminal (+3.3V)
77	VSS	—	Ground terminal
78	HD2	I/O	Two-way AV data bus with the CPU/ATA interface IC
79	DVDD	—	Power supply terminal (+3.3V)
80	HD1	I/O	Two-way AV data bus with the CPU/ATA interface IC
81	CLKS1	I	Clock source signal input terminal Not used
82	VSS	—	Ground terminal
83	EXT_INT7	I	AV bus block data transfer completely signal input from the CPU/ATA interface IC
84, 85	VSS	—	Ground terminal
86	XHAS	I	Host address strobe signal input terminal Not used
87	XHDS1	I	AV bus data strobe signal input from the XC9536XL
88	HD0	I/O	Two-way AV data bus with the CPU/ATA interface IC
89	TOUT1 (AV_DRQ2)	O	AV bus data request signal output to the CPU/ATA interface IC
90	TINP1	I	Timer or general-purpose input terminal Not used
91	DVDD	—	Power supply terminal (+3.3V)
92, 93	CVDD	—	Power supply terminal (+1.8V)
94	XHDS2	I	Host data strobe signal input terminal Not used
95	VSS	—	Ground terminal
96	XHCS	I	AV bus chip select signal input from the XC9536XL
97	TOUT0 (AV_DRQ1)	O	AV bus data request signal output to the CPU/ATA interface IC
98	TINP0	I	Timer or general-purpose input terminal Not used
99	CLKX0	O	Clock signal output terminal Not used
100, 101	VSS	—	Ground terminal
102, 103	HCNTL0, HCNTL1	I	AV bus address signal input from the CPU/ATA interface IC
104	HR/XW	I	AV bus read or write enable signal input from the CPU/ATA interface IC
105	FSX0	O	Frame sync signal output terminal Not used
106	DX0	O	Data signal output terminal Not used
107	CLKR0	I	Clock signal input terminal Not used
108, 109	VSS	—	Ground terminal

Pin No.	Pin Name	I/O	Description
110	DVDD	—	Power supply terminal (+3.3V)
111	XHRDY	O	AV bus ready signal output to the XC9536XL
112	HHWIL	I	AV bus address signal input from the CPU/ATA interface IC
113	DR0	I	Data signal input terminal Not used
114	DVDD	—	Power supply terminal (+3.3V)
115	FSR0	I	Frame sync signal input terminal Not used
116	VSS	—	Ground terminal
117	XHOLD	I	Hold request signal input terminal Not used
118	XHOLDA	O	Hold request acknowledge signal output terminal Not used
119	BUSREQ	O	Bus request signal output terminal Not used
120	XHINT	O	AV bus interrupt request signal output to the CPU/ATA interface IC
121	CVDD	—	Power supply terminal (+1.8V)
122	VSS	—	Ground terminal
123	CLKS0	I	Clock source signal input terminal Not used
124, 125	CVDD	—	Power supply terminal (+1.8V)
126, 127	ED0, ED1	I/O	Two-way data bus terminal Not used
128	VSS	—	Ground terminal
129	FSX1	O	Frame sync signal output terminal Not used
130	DX1 (AV_DRQ3)	O	AV bus data request signal output to the CPU/ATA interface IC
131	CLKX1	O	Clock signal output terminal Not used
132, 133	CVDD	—	Power supply terminal (+1.8V)
134, 135	ED2, ED3	I/O	Two-way data bus terminal Not used
136	CVDD	—	Power supply terminal (+1.8V)
137	CLKR1	I	Clock signal input terminal Not used
138	DR1	I	Data signal input terminal Not used
139	FSR1	I	Frame sync signal input terminal Not used
140, 141	VSS	—	Ground terminal
142	DVDD	—	Power supply terminal (+3.3V)
143, 144	ED4, ED5	I/O	Two-way data bus terminal Not used
145	DVDD	—	Power supply terminal (+3.3V)
146	RSV4	O	Reserved terminal Not used
147	ED31	I/O	Two-way data bus terminal Not used
148, 149	VSS	—	Ground terminal
150 to 152	ED6 to ED8	I/O	Two-way data bus terminal Not used
153 to 155	ED28 to ED30	I/O	Two-way data bus terminal Not used
156, 157	VSS	—	Ground terminal
158	ED9	I/O	Two-way data bus terminal Not used
159	VSS	—	Ground terminal
160	ED10	I/O	Two-way data bus terminal Not used
161	DVDD	—	Power supply terminal (+3.3V)
162, 163	ED27, ED26	I/O	Two-way data bus terminal Not used
164, 165	CVDD	—	Power supply terminal (+1.8V)
166	DVDD	—	Power supply terminal (+3.3V)
167, 168	ED11, ED12	I/O	Two-way data bus terminal Not used
169, 170	ED24, ED25	I/O	Two-way data bus terminal Not used

Pin No.	Pin Name	I/O	Description
171	DVDD	—	Power supply terminal (+3.3V)
172, 173	VSS	—	Ground terminal
174	ED13	I/O	Two-way data bus terminal Not used
175, 176	ED15, ED14	I/O	Two-way data bus terminal Not used
177, 178	ED22, ED21	I/O	Two-way data bus terminal Not used
179	ED23	I/O	Two-way data bus terminal Not used
180	VSS	—	Ground terminal
181	DVDD	—	Power supply terminal (+3.3V)
182	CVDD	—	Power supply terminal (+1.8V)
183	DVDD	—	Power supply terminal (+3.3V)
184, 185	VSS	—	Ground terminal
186, 187	CVDD	—	Power supply terminal (+1.8V)
188	DVDD	—	Power supply terminal (+3.3V)
189	VSS	—	Ground terminal
190, 191	CVDD	—	Power supply terminal (+1.8V)
192	DVDD	—	Power supply terminal (+3.3V)
193	VSS	—	Ground terminal
194	EA21	O	Address signal output terminal Not used
195	XBE1	O	Byte enable control signal output terminal Not used
196	VSS	—	Ground terminal
197, 198	ED20, ED19	I/O	Two-way data bus terminal Not used
199	CVDD	—	Power supply terminal (+1.8V)
200	ED16	I/O	Two-way data bus terminal Not used
201	XBE3	O	Byte enable control signal output terminal Not used
202	XCE3	O	Memory space enables signal output terminal Not used
203, 204	EA3, EA5	O	Address signal output terminal Not used
205, 206	EA8, EA10	O	Address signal output terminal Not used
207	XSDCAS	O	SD-RAM column address strobe signal output terminal Not used
208	XSDWE	O	SD-RAM write enable signal output terminal Not used
209	DVDD	—	Power supply terminal (+3.3V)
210	EA12	O	Address signal output terminal Not used
211	DVDD	—	Power supply terminal (+3.3V)
212	EA17	O	Address signal output terminal Not used
213	XCE0	O	Memory space enables signal output terminal Not used
214	CVDD	—	Power supply terminal (+1.8V)
215	DVDD	—	Power supply terminal (+3.3V)
216	XBE0	O	Byte enable control signal output terminal Not used
217	VSS	—	Ground terminal
218	CVDD	—	Power supply terminal (+1.8V)
219	DVDD	—	Power supply terminal (+3.3V)
220	ED17	I/O	Two-way data bus terminal Not used
221	VSS	—	Ground terminal
222	XCE2	O	Memory space enable signal output terminal Not used
223, 224	EA4, EA6	O	Address signal output terminal Not used
225	DVDD	—	Power supply terminal (+3.3V)
226	XSDRAS	O	SD-RAM row address strobe signal output terminal Not used

Pin No.	Pin Name	I/O	Description
227	VSS	—	Ground terminal
228	DVDD	—	Power supply terminal (+3.3V)
229 to 231	EA11, EA13, EA15	O	Address signal output terminal Not used
232	VSS	—	Ground terminal
233	EA19	O	Address signal output terminal Not used
234	XCE1	O	Memory space enables signal output terminal Not used
235	CVDD	—	Power supply terminal (+1.8V)
236 to 238	VSS	—	Ground terminal
239	ED18	I/O	Two-way data bus terminal Not used
240	XBE2	O	Byte enable control signal output terminal Not used
241	ARDY	I	Asynchronous memory ready signal input terminal Not used
242	EA2	O	Address signal output terminal Not used
243	DVDD	—	Power supply terminal (+3.3V)
244, 245	EA7, EA9	O	Address signal output terminal Not used
246	ECLKOUT	O	EMIF clock signal output terminal Not used
247	ECLKIN	I	EMIF clock signal input terminal Not used
248	CLKOUT2	O	Clock output at half of device speed Not used
249	VSS	—	Ground terminal
250 to 252	EA14. EA16, EA18	O	Address signal output terminal Not used
253	DVDD	—	Power supply terminal (+3.3V)
254	EA20	O	Address signal output terminal Not used
255	VSS	—	Ground terminal
256	RSV5	O	Reserved terminal Not used

• **MAIN BOARD IC4001 CXD1859AGA**
(DIGITAL SIGNAL PROCESSOR, MAGIC GATE CORE, MEMORY STICK INTERFACE)

Pin No.	Pin Name	I/O	Description
1	CLKSEL2	I	Clock mode setting terminal Fixed at "L" in this set
2	XTAL0	O	Sub system clock output terminal (22.579MHz)
3	EXTAL0	I	Sub system clock input terminal (22.579MHz)
4	VSS0	—	Ground terminal
5	CLKSEL3	I	Clock mode setting terminal Fixed at "H" in this set
6	CLKSEL4	I	Clock mode setting terminal Fixed at "L" in this set
7	VDD0	—	Power supply terminal (+1.8V)
8	VDE0	—	Power supply terminal (+3.3V)
9	XTAL1	O	Main system clock output terminal (20MHz)
10	EXTAL1	I	Main system clock input terminal (20MHz)
11	XOSCSTP	O	Stop oscillating signal output terminal "L": stop oscillating Not used
12	VSS1	—	Ground terminal
13	XRST	I	Reset signal input from the CPU
14	AVS1	—	Ground terminal (for PLL)
15	AVD1	—	Power supply terminal (+3.3V) (for PLL)
16	FS256	O	Clock signal (11.2896 MHz) output to the D/A converter
17	DP0	O	Ready/busy signal output to the EEPROM "L": busy, "H": ready
18	DP1	O	Reset signal output to the EEPROM
19	VSS2	—	Ground terminal
20	BS	O	Bus state signal output to a memory stick
21	SCLK	O	Clock signal output to a memory stick
22	DIO	I/O	Two-way data bus with a memory stick
23	VDE1	—	Power supply terminal (+3.3V)
24	VDD1	—	Power supply terminal (+1.8V)
25	DP2	O	USB communication on/off control signal output terminal "H": USB communication on Not used
26	INS	I	Memory stick in/out detection signal input "L": memory stick is inserted
27	VSS3	—	Ground terminal
28	UDP	I/O	Two-way data bus of USB data Not used
29	AVD2	—	Power supply terminal (+3.3V)
30	UDM	I/O	Two-way data bus of UBS data Not used
31	BCLK	O	Bit clock signal output to the D/A converter
32	LRCK	O	L/R sampling clock signal output to the D/A converter
33	SDO	O	Audio signal output to the D/A converter
34	VSS4	—	Ground terminal
35	SDI	I	Audio signal input terminal Not used
36	DAOUT	O	Digital audio signal output terminal Not used
37	DAIN	I	Digital audio signal input terminal Not used
38	VDE2	—	Power supply terminal (+3.3V)
39 to 44	DB0 to DB5	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
45	VDD2	—	Power supply terminal (+1.8V)
46	VSS5	—	Ground terminal
47 to 52	DB6 to DB11	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
53	VDE3	—	Power supply terminal (+3.3V)

Pin No.	Pin Name	I/O	Description
54 to 56	DB12 to DB14	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
57	VSS6	—	Ground terminal
58	DB15	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, USB interface IC, display controller, 64MB flash memory and 128MB SD-RAM
59 to 63	ADR0 to ADR4	I	Address signal input from the CPU
64	VSS7	—	Ground terminal
65, 66	ADR5, ADR6	I	Address signal input from the CPU
67	VDD3	—	Power supply terminal (+1.8V)
68	VDE4	—	Power supply terminal (+3.3V)
69 to 71	ADR7 to ADR9	I	Address signal input from the CPU
72	VSS8	—	Ground terminal
73 to 77	ADR10 to ADR14	I	Address signal input from the CPU
78	XRD	I	Read enable signal input from the CPU
79	VSS9	—	Ground terminal
80	XWRU	I	Write enable signal input from the CPU (upper byte)
81	XWRL	I	Write enable signal input from the CPU (lower byte)
82	XCS	I	Chip select signal input from the CPU
83	VDE5	—	Power supply terminal (+3.3V)
84	VDD4	—	Power supply terminal (+1.8V)
85	XIRQ	O	Interrupt request signal output to the ATA interface
86	XDREQ0	O	USB DMA request signal output terminal Not used
87	VSS10	—	Ground terminal
88	XDACK0	I	USB DMA acknowledge signal input terminal Not used
89	XDREQ1	O	USB DMA request signal output terminal Not used
90	XDACK1	I	USB DMA acknowledge signal input terminal Not used
91	SIOSI	I	Serial data input from the EEPROM
92	SIOSO	O	Serial data output to the EEPROM
93	SIOCS	O	Chip select signal output to the EEPROM
94	VSS11	—	Ground terminal
95	SIOCK	O	Serial data transfer clock signal output to the EEPROM
96	ACLK	I	ATRAC3 data transfer clock signal input terminal Not used
97	XARQ	O	ATRAC3 data request signal output terminal Not used
98	VDE6	—	Power supply terminal (+3.3V)
99	XABS	I	ATRAC3 data request signal input terminal Not used
100	ACDO	O	ATRAC3 data output terminal Not used
101	ACDI	I	ATRAC3 data input terminal Not used
102	DP3	O	System wake up request signal output terminal Not used
103	TKURST	I	Not used
104	TKDBG	I	Not used
105	VDD5	—	Power supply terminal (+1.8V)
106	VSS12	—	Ground terminal
107	TKTCK	I	Not used
108	TKTDI	I	Not used
109	TKTMS	I	Not used
110	TKTDO	O	Not used

Pin No.	Pin Name	I/O	Description
111	TKTINT	O	Not used
112	MD0	I	Mode setting terminal Fixed at “H” in this set
113	VDE7	—	Power supply terminal (+3.3V)
114	MD1	I	Mode setting terminal Fixed at “L” in this set
115	MD2	I	Mode setting terminal Fixed at “H” in this set
116	TRST	I	Not used
117	VSS13	—	Ground terminal
118	CLKOUT	O	System clock signal output terminal Not used
119	CLKSEL0	I	Clock mode setting terminal Fixed at “H” in this set
120	CLKSEL1	I	Clock mode setting terminal Fixed at “H” in this set

• **MAIN BOARD IC4301 ISP1161BD-118 (USB INTERFACE)**

Pin No.	Pin Name	I/O	Description
1	D_GND	—	Ground terminal (for digital system)
2 to 7	D2 to D7	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, display controller, 64MB flash memory and 128MB SD-RAM
8	D_GND	—	Ground terminal (for digital system)
9 to 14	D8 to D13	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, display controller, 64MB flash memory and 128MB SD-RAM
15	D_GND	—	Ground terminal (for digital system)
16, 17	D14, D15	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, display controller, 64MB flash memory and 128MB SD-RAM
18	D_GND	—	Ground terminal (for digital system)
19	VHOLD_1	—	Voltage holding terminal
20	NC	O	Not used
21	CS_N	I	Chip select signal input from the CPU
22	RD_N	I	Read strobe signal input from the CPU
23	WR_N	I	Write enable signal input from the CPU
24	VHOLD_2	—	Voltage holding terminal
25	DREQ1	O	DMA request signal output to the CPU
26	DREQ2	O	DMA request signal output terminal Not used
27	DACK1	I	DMA acknowledge signal input from the CPU
28	DACK2	I	DMA acknowledge signal input terminal Not used
29	INT1	O	Interrupt request signal output to the CPU/ATA interface IC
30	INT2	O	Interrupt request signal output terminal Not used
31	TEST	I	For test terminal (normally fixed at “H”)
32	RESET_N	I	Reset signal input from the CPU “L” : reset
33	NDP_SEL	I	Number of downstream port selection terminal “L” : 1 downstream port, “H” : 2 downstream ports (fixed at “L” in this set)
34	EOT	I	Not used
35	D_GND	—	Ground terminal (for digital system)
36	D_SUSPEND	O	Internal device controller's suspend signal output terminal Not used
37	D_WAKEUP	I	Wake up signal input terminal Not used
38	GL_N	O	LED drive signal output terminal Not used
39	D_VBUS	I	USB connect detection signal input terminal Not used
40	H_WAKEUP	I	Wake up signal input terminal Not used
41	CLKOUT	O	Clock output terminal (3 to 48MHz) Not used
42	H_SUSPEND	O	Internal host controller's suspend signal output terminal Not used
43	X1	I	System clock input terminal (6MHz)
44	X2	O	System clock output terminal (6MHz)
45	D_GND	—	Ground terminal (for digital system)
46	H_PSW1_N	O	Power on/off control signal output terminal Not used
47	H_PSW2_N	O	Power on/off control signal output terminal Not used
48	D_D–	I/O	Two-way data bus of USB data (–) Not used
49	D_D+	I/O	Two-way data bus of USB data (+) Not used
50	H_D1–	I/O	Two-way data bus of USB data (–)
51	H_D1+	I/O	Two-way data bus of USB data (+)
52	H_D2–	I/O	Two-way data bus of USB data (–) Not used
53	H_D2+	I/O	Two-way data bus of USB data (+) Not used

Pin No.	Pin Name	I/O	Description
54	H_OC1_N	I	Over current detection signal input terminal
55	H_OC2_N	I	Over current detection signal input terminal
56	VCC2	—	Power supply terminal (+3.3V)
57	A_GND	—	Ground terminal (for analog system)
58	VREG	O	+3.3V power output terminal
59, 60	A0, A1	I	Address signal input from the CPU
61	NC	O	Not used
62	D_GND	—	Ground terminal (for digital system)
63, 64	D0, D1	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, display controller, 64MB flash memory and 128MB SD-RAM

• **MAIN BOARD IC5001 XC9572XL-10VQ44C-FL11 (DISPLAY CONTROLLER)**

Pin No.	Pin Name	I/O	Description
1	AI<1>	I	Address signal input from the CPU
2, 3	DI<15>, DI<14>	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, USB interface IC, 64MB flash memory and 128MB SD-RAM
4	GND	—	Ground terminal
5 to 8	DI<13> to DI<10>	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, USB interface IC, 64MB flash memory and 128MB SD-RAM
9	TDI	I	Not used
10	TMS	I	Not used
11	TCK	I	Not used
12 to 14	DI<9> to DI<7>	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, USB interface IC, 64MB flash memory and 128MB SD-RAM
15	VCC	—	Power supply terminal (+3.3V)
16	DI<6>	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, USB interface IC, 64MB flash memory and 128MB SD-RAM
17	GND	—	Ground terminal
18 to 23	DI<5> to DI<0>	I/O	Two-way data bus with the CPU, CPU/ATA interface IC, memory stick interface IC, USB interface IC, 64MB flash memory and 128MB SD-RAM
24	TDO	O	Not used
25	GND	—	Ground terminal
26	VCC	—	Power supply terminal (+3.3V)
27	NC	I/O	Not used
28	SCKO	O	Serial data transfer clock signal output to the fluorescent indicator tube and LED controller
29	SOO	O	Serial data output to the fluorescent indicator tube and LED controller
30	FL_DONI	I	Fluorescent indicator tube driver power supply on/off control signal input terminal “H”: fluorescent indicator tube on
31	LATO	O	Serial data latch pulse signal output to the fluorescent indicator tube and LED controller
32	RSTI	I	System reset signal input from the system controller
33	DACKI	I	Acknowledge signal input from the CPU
34	BKO	O	Bit clock signal output to the fluorescent indicator tube
35	VCC	—	Power supply terminal (+3.3V)
36 to 39	NC	I/O	Not used
40	DREQO	O	DMA request signal output to the CPU
41	WEI	I	Write enable signal input from the CPU
42	CS6I	I	Chip select signal input from the CPU
43	MCKI	I	Clock signal input from the oscillator
44	AI<0>	I	Address signal input from the CPU

• **SUB BOARD IC501 MB90F574APMT-G-LPN1(SYSTEM CONTROLLER)**

Pin No.	Pin Name	I/O	Description
1 to 4	NC	O	Not used
5	LINE_MUTING	O	Audio line muting on/off control signal output terminal
6	XSYS_RST	O	System reset signal output terminal "L": reset Not used
7	MAIN_RST	O	System reset signal output terminal
8	VCC	—	Power supply terminal (+5V)
9	XAMP_MUTING	O	Muting on/off control signal output to the power amplifier "L": muting
10	E2CKO	O	Serial data transfer clock signal output to the FM/AM tuner pack
11	E2SIO	I/O	Two-way data bus with the FM/AM tuner pack
12	SUB_RXD/ FLS_SI	I	UART receive data input from the CPU "L" active
13	SUB_TXD/ FLS_SO	O	UART transmit data output to the CPU "L" active
14	BUS_ON	O	Bus on/off control signal output terminal "L" active Not used
15	BEEP	O	Buzzer drive signal output
16	TELATT	I	Telephone muting signal detection input terminal At input of "H", the signal is attenuated by 20 dB
17	UNISI	I	Serial data input terminal Not used
18	UNISO	O	Serial data output terminal Not used
19	UNICLK	O	Serial data transfer clock signal output terminal Not used
20	NC	O	Not used
21	DAC_SO	O	Serial data output to the D/A converter
22	DAC_CLK	O	Serial data transfer clock signal output to the D/A converter
23	XSIRCS_RST	O	SIRCS reset signal output terminal "L": reset Not used
24	SIRCS	I	Remote control signal input from the remote control receiver
28	RTC_SI	I	Serial data input from the real time clock
25	RTC_SO	O	Serial data output to the real time clock
26	RTC_CLK	O	Serial data transfer clock signal output to the real time clock
27	RTC CS	O	Chip select signal output to the real time clock
29	XDAC_CS	O	Chip select signal output to the D/A converter
30	XMS_DET0	I	Memory stick in/out detection signal input "L": memory stick is inserted
31	XS_MUTING	O	Muting on/off control signal output to the electrical volume "L": muting
32	XUSB_DET	I	USB cable detection signal input "L": USB cable is connected
33	VSS	—	Ground terminal
34	C	—	Connected to the external capacitor for power supply
35	NC	—	Not used
36	XMS_DET1	I	Memory stick in/out detection signal input "L": memory stick is inserted
37	FSW_SFT	O	Oscillation frequency shift control signal output for switching regulator "L": 300kHz, "H": 330kHz
38	DVCC	—	Power supply terminal (+5V) (for the D/A converter)
39	DVSS	—	Ground terminal (for the D/A converter)
40, 41	NC	—	Not used
42	AVCC	—	Power supply terminal (+5V) (for the A/D converter)
43	AVRH	I	Reference voltage (+5V) input terminal (for the A/D converter)
44	AVRL	I	Reference voltage (0V) input terminal (for the A/D converter)
45	AVSS	—	Ground terminal (for the A/D converter)
46	KEYIN0	I	Key input terminal (A/D input)
47	TEMP	I	Connected to the temperature sensor

Pin No.	Pin Name	I/O	Description
48	RC_IN0	I	Key input from the rotary commander (A/D input) Not used
49	FP_I_DET	I	Over load detection signal input from the front panel open/close motor driver
50	QUALITY	I	Noise level detection signal input terminal Not used
51	TR_I_DET	I	Over load detection signal input from the tray open/close motor driver
52	MPTH	I	Multi-path detection signal input terminal Not used
53	VSM	I	FM and AM signal meter voltage detection input from the FM/AM tuner pack (A/D input)
54	VCC	—	Power supply terminal (+5V)
55	AMP_ON	O	Power amplifier drive signal output terminal "L": standby, "H": amplifier on
56	NS MASK	O	Noise detect port mask output terminal "H" active Not used
57	DOOR_IND	O	LED drive signal output terminal
58	XTROPEN_END	I	Detection input from the tray open-end detect switch "L": active
59	XTRCLOSE_END	I	Detection input from the tray close-end detect switch "L": active
60	TRAY_LED	O	LED drive signal output terminal
61	TRAY_M+	O	Motor drive signal output to the tray open/close motor driver "L": tray open
62	TRAY_M–	O	Motor drive signal output to the tray open/close motor driver "L": tray close
63	VSS	—	Ground terminal
64	NC	—	Not used
65	FSW_IN	I	Oscillation frequency count terminal
66	NC	—	Not used
67	SH_WDT	I	Watch dog timer detection signal input terminal
68	XFAIL	I	Rewriting failure detection terminal "L": rewriting failure
69	XFLASH _W	I	FLASH writing mode detection terminal "L": flash writing mode
70	I2CSIO	I/O	Two-way data bus with the FM/AM tuner pack and electrical volume
71	I2CCKO	O	Serial data transfer clock signal output to the FM/AM tuner pack and electrical volume
72	KEYACK	I	Input of acknowledge signal for the key entry Acknowledge signal is input to source and eject keys in the power off status On at input of "H"
73	X1A	O	Sub system clock output terminal (32.768kHz) Not used
74	X0A	I	Sub system clock input terminal (32.768kHz)
75	XDAVN	I	Data transmit completed detect signal input terminal Not used
76	XRTC_INT	I	Alarm interrupt request signal input from the real time clock
77	BU IN	I	Back up power supply detect signal input terminal "L" is input at low voltage
78	XPDOWN	I	Power down detection signal input from the voltage detect "L": power down, normally: "H"
79	RC_IN1	I	Key input from the rotary commander (A/D input) Not used
80	XADON	O	A/D converter power control signal output When the KEYACK (pin ⑦②) that controls reference voltage power for key A/D conversion input is active, "L" is output from this terminal to enable the input
81	XACC_IN	I	Accessory power supply detect signal input terminal "L": accessory on
82	FLS_ON	O	Level shift on/off control of UART communication and watch dog timer signal line
83	PW_ON	O	Audio system power supply on/off control signal output to the regulator "H": power on
84	XTEST_IN	I	For test terminal Normally fixed at "H"
85	RAMBU	I	Internal RAM reset detection signal input from the reset signal generator Input terminal to check that RAM data are not destroyed due to low voltage This checking is made within 100 msec after reset
86	HSTX	I	Hardware standby signal input terminal "L": hardware standby
87 to 89	MD2 to 0	I	Mode setting input terminal
90	XRST	I	System reset signal input from the reset signal generator "L": reset
91	VSS	—	Ground terminal

Pin No.	Pin Name	I/O	Description
92	X0	I	Main system clock input terminal (3.68MHz)
93	X1	O	Main system clock output terminal (3.68MHz)
94	VCC	—	Power supply terminal (+5V)
95	ILL IN	I	Illuminate line detect signal input for the auto dimmer control Dimmer is present at input of “L”
96	NC	—	Not used
97	FP_M–	O	Motor drive signal output to the front panel open/close motor driver “L”: front panel close
98	FP_M+	O	Motor drive signal output to the front panel open/close motor driver “L”: front panel open
99	XFPCLOSE_END	I	Detection input from the panel close-end detect switch “L”: active
100	XFPOPEN_END	I	Detection input from the panel open-end detect switch “L”: active
101	MOTOR_ON	O	Motor power on/off control signal output terminal
102	NC	—	Not used
103	OFFREC_LED	O	LED drive signal output terminal Not used
104, 105	DSTSEL0, DSTSEL1	I	Destination setting terminal
106	XNOSE_SW	I	Detects the removal of the attaching and removing type front panel block “L”: attaching
107	RE_RA	I	Rotary encoder dial pulse input from the rotary encoder (Right/A phase input)
108	RE_RB	I	Rotary encoder dial pulse input from the rotary encoder (Right/B phase input)
109	RE_LA	I	Rotary encoder dial pulse input from the rotary encoder (Left/A phase input)
110	RE_LB	I	Rotary encoder dial pulse input from the rotary encoder (Left/B phase input)
111	MS_LED	O	LED drive signal output terminal
112	FAN_ON	O	Fan motor drive signal output terminal “H”: active Not used
113	NC	—	Not used
114	TUNON	O	Tuner system power supply on/off control terminal
115	D5.0V_OK	I	Power supply voltage (D5V) detection terminal Not used
116	D3.3V_OK	I	Power supply voltage (D3.3V) detection terminal Not used
117	D1.8V_OK	I	Power supply voltage (D1.8V) detection terminal Not used
118	D1.9V_OK	I	Power supply voltage (D1.9V) detection terminal Not used
119	VSS	—	Ground terminal
120	MAIN_PON	O	Main system power supply on/off control signal output terminal “H”: power on

• **DISPLAY BOARD IC903 RRX9000-0401R#01 (SIRCS CONTROLLER)**

Pin No.	Pin Name	I/O	Description
1	VDD	—	Power supply terminal (+5V)
2	VSS	—	Ground terminal
3	XIN	I	System clock input terminal (4 MHz)
4	XOUT	O	System clock output terminal (4 MHz)
5	CNVSS	—	Ground terminal
6	$\overline{\text{RESET}}$	I	Reset signal input terminal "L": reset
7, 8	F0, F1	—	Not used
9	SIRCS IN	I	SIRCS signal input from the remote control receiver
10	G1/INT	—	Not used
11, 12	G2, G3	—	Not used
13 to 16	S3 to S0	—	Not used
17	D3/K	O	SIRCS signal output to the system controller
18 to 20	D2/C, D1, D0	—	Not used

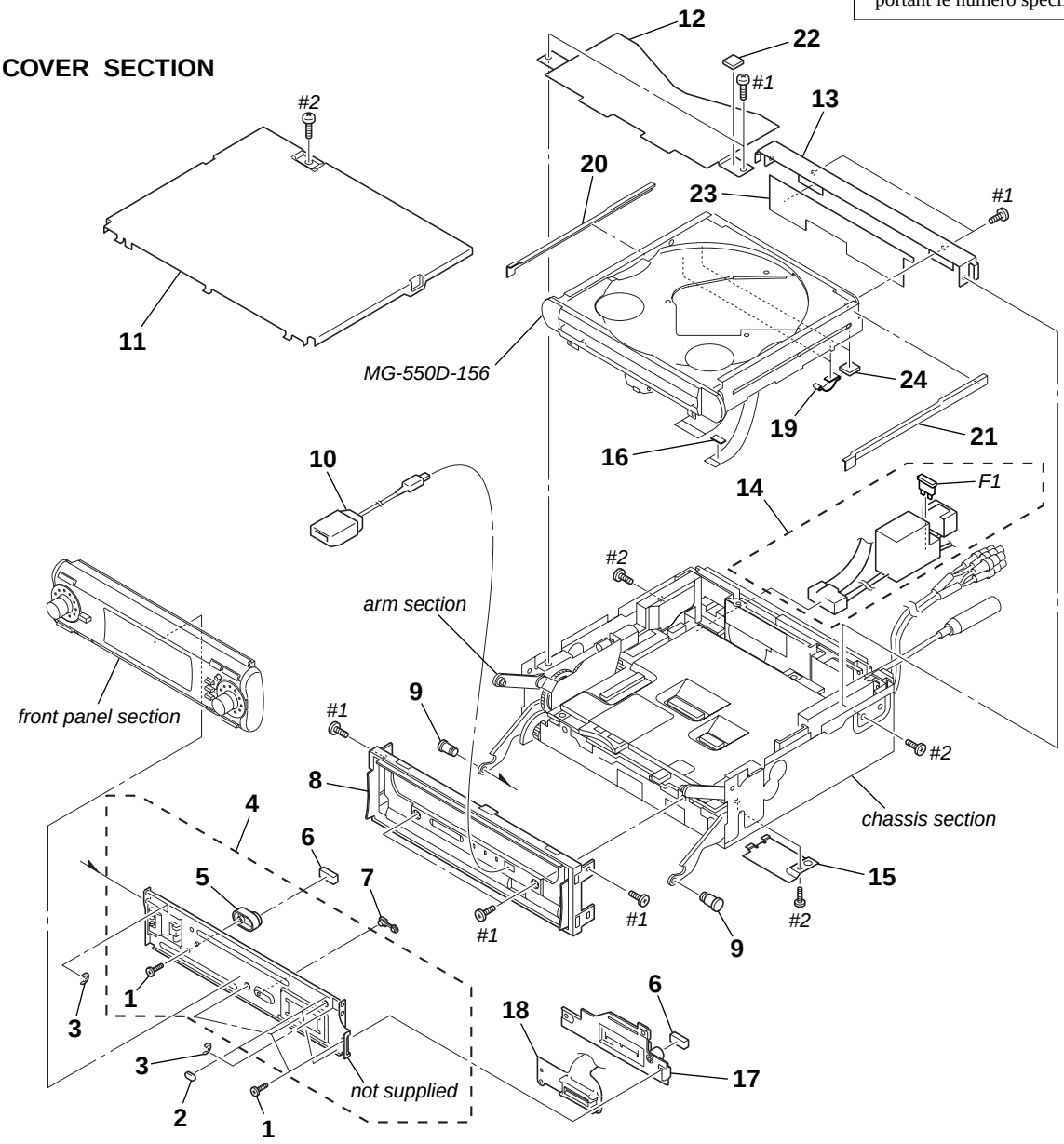
SECTION 7
EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Accessories are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

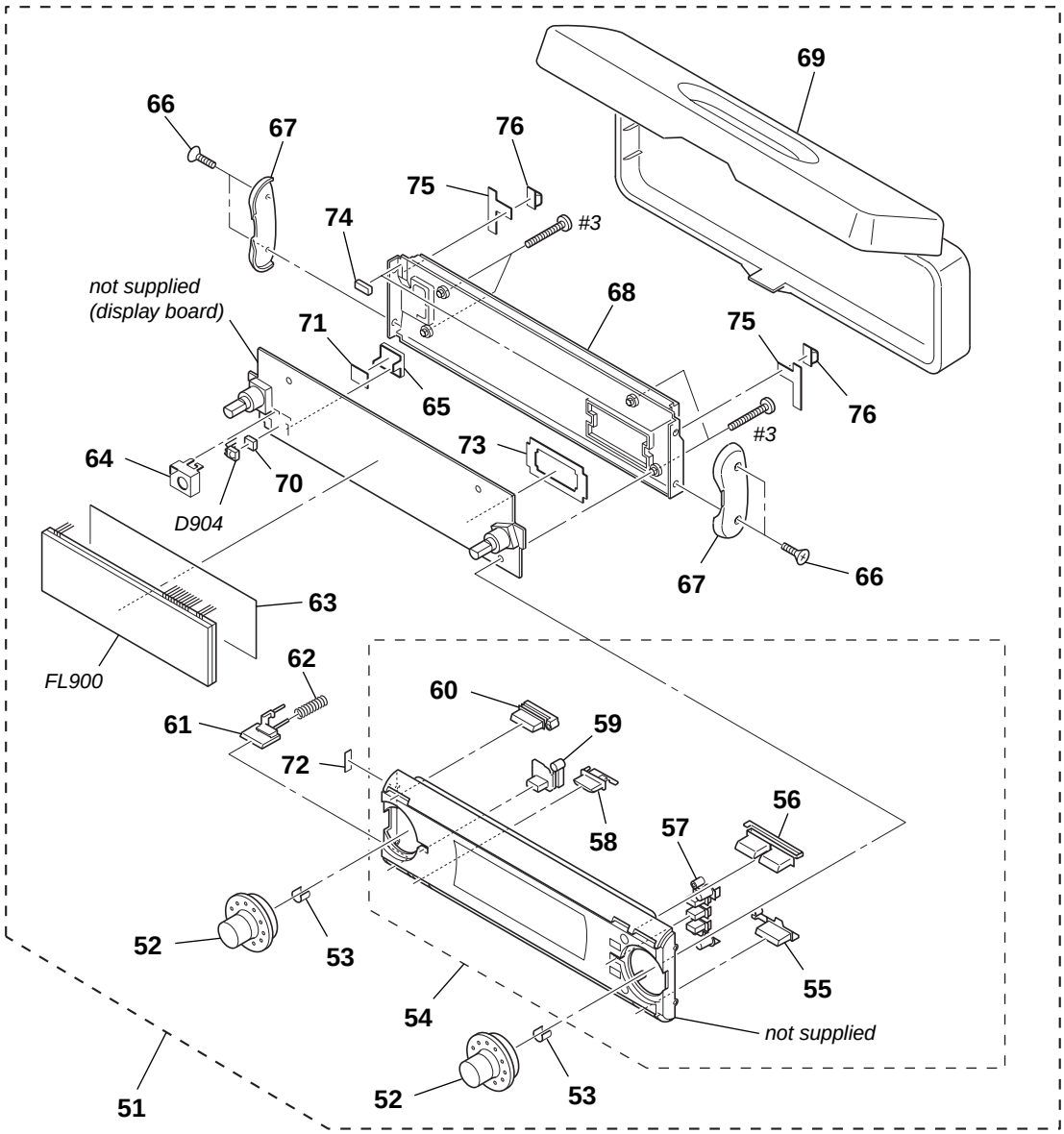
Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. COVER SECTION



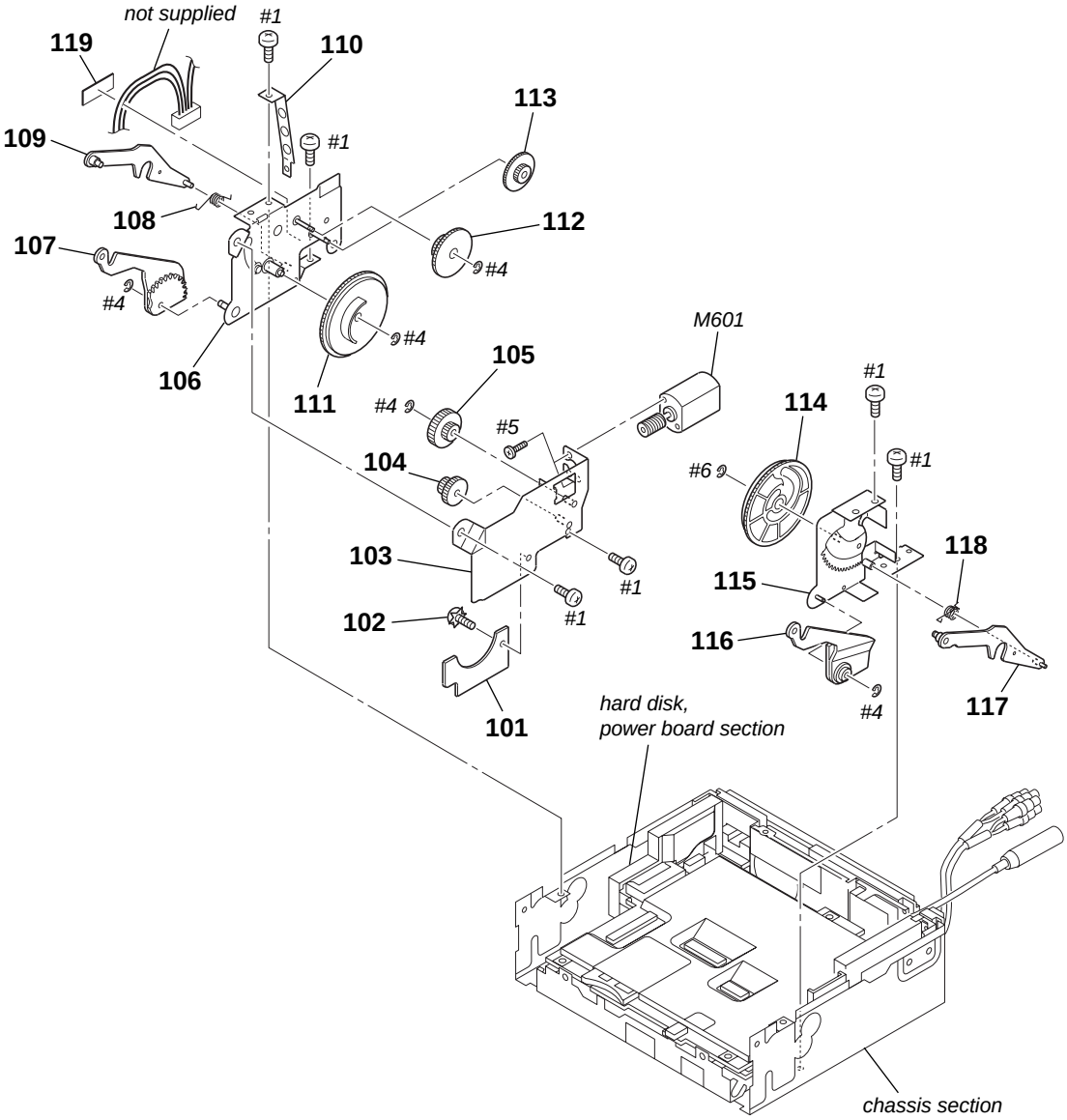
Ref. No.	Part No.	Description	Remark
1	3-230-416-01	SCREW	
2	3-226-653-11	PLATE (LCD), BLIND	
3	3-243-606-01	RING (PANEL), E	
4	X-3382-197-1	PANEL ASSY, BASE	
5	3-238-969-01	BRACKET (CUSHION)	
6	3-244-973-01	CUSHION (FB)	
7	3-237-001-01	BUTTON (RESET)	
8	X-3382-159-2	PANEL (CD) ASSY, SUB	
9	3-242-600-01	SHAFT (BASE PANEL , D)	
10	1-824-017-11	CORD, CONNECTION (DIGITAL I/O CABLE)	
11	3-236-999-11	COVER	
12	3-236-998-01	BRACKET (COVER)	
13	3-236-963-02	BRACKET (TRAY)	
14	1-790-926-41	CORD (WITH CONNECTOR) (POWER)	
15	3-238-886-01	COVER (CHASSIS)	
16	3-243-553-01	SHEET (FLEXIBLE)	
17	3-237-000-02	COVER (PANEL)	
18	1-761-522-11	MOUNTED FLEXIBLE PWB	
19	3-244-647-01	STICK FINGER	
20	3-244-639-01	SHEET (MECHANICAL-L)	
21	3-244-640-01	SHEET (MECHANICAL-R)	
22	3-244-641-12	SHEET (A), VIBRATION	
23	3-244-638-01	SHEET (BRACKET)	
24	3-244-641-22	SHEET (A), VIBRATION	
F1	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	

7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-3315-657-A	PANEL COMPLETE ASSY	
52	X-3381-659-1	KNOB (VOL) ASSY	
53	2-127-723-01	SPRING (KNOB)	
54	X-3381-658-3	PANEL ASSY, FRONT	
55	3-236-827-01	BUTTON (REC) (● REC)	
56	3-236-821-01	BUTTON (EJECT/OPEN) (OPEN. CD ⏏)	
57	3-236-822-01	BUTTON (MENU) (M. F1. F2. F3. F)	
58	3-236-828-01	BUTTON (OFF)	
59	3-236-971-11	BUTTON (DSPL)	
60	3-236-826-01	BUTTON (SOURCE)	
61	3-236-968-11	BUTTON (RELEASE)	
62	3-242-616-01	SPRING (RELEASE)	
63	3-238-971-01	SPACER (FL)	
64	3-241-691-01	CASE (IR-T), SHIELD	
* 65	3-227-281-02	CASE (IR-B), SHIELD	
66	3-238-973-01	SCREW, ORNAMENTAL	
67	3-237-002-11	PLATE, ORNAMENTAL	
68	3-236-993-01	PLATE, FRONT BACK	
69	X-3381-407-1	CASE ASSY (FOR FRONT PANEL)	
70	3-242-615-01	SPACER (IR)	
71	3-241-692-01	INSULATED PLATE (IR)	
72	3-245-440-01	SHEET (F LEFT)	
73	3-244-135-01	SHEET (CONNECTOR)	
74	3-244-979-01	CUSHION	
75	3-244-652-01	SHEET (BP), ARC	
76	3-244-954-01	SHIELD (BP)	
D904	8-719-083-14	DIODE RRX9000-0501 (REMOTE CONTROL RECEIVER)	
FL900	1-518-814-11	INDICATOR TUBE, FLUORESCENT	
#3	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

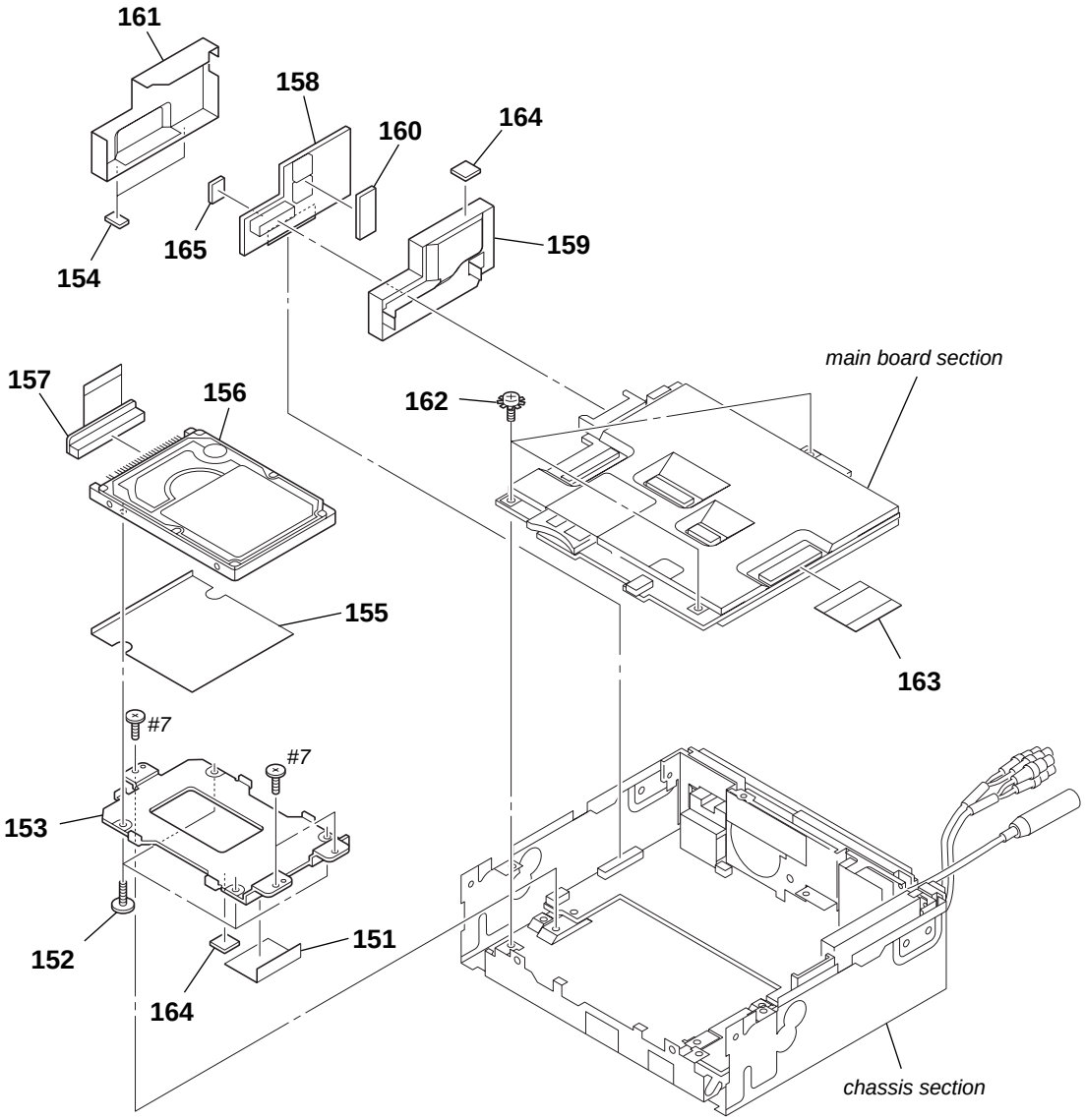
7-3. ARM SECTION



Ref. No.	Part No.	Description	Remark
101	A-3274-407-A	SWITCH BOARD, COMPLETE	
102	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
103	X-3381-368-1	BRACKET (SUB L) (RIVETING) ASSY	
104	3-237-003-01	GEAR (A)	
105	3-236-946-01	GEAR (WORM WHEEL)	
106	X-3381-359-1	BRACKET (MAIN L) ASSY	
107	X-3381-599-1	ARM (D. L) ASSY	
108	3-243-374-01	SPRING (ARM. L)	
109	X-3381-364-1	ARM (U L) ASSY	
110	3-238-628-01	COVER (PROTECTION)	
111	3-236-947-01	GEAR (CAM L)	
112	3-237-005-01	GEAR (C)	

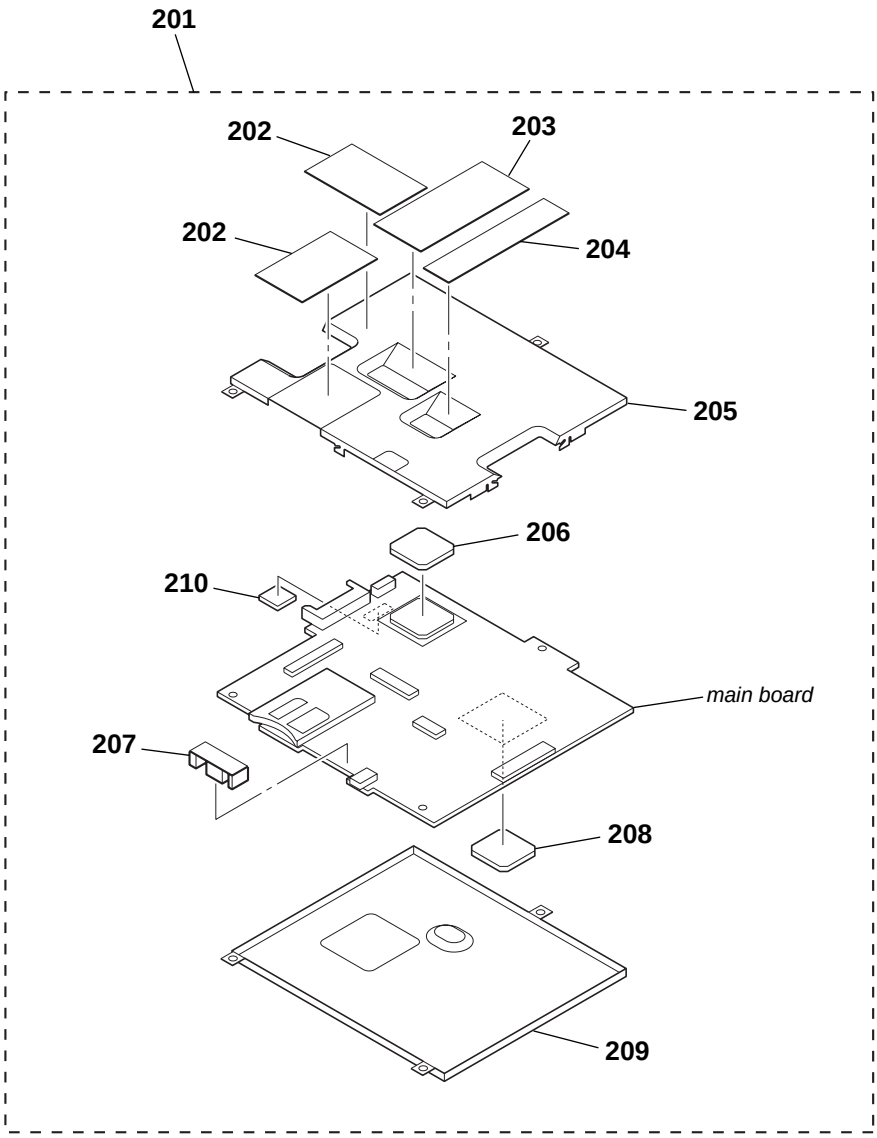
Ref. No.	Part No.	Description	Remark
113	3-237-004-01	GEAR (B)	
114	3-236-961-01	GEAR (CAM R)	
115	X-3381-360-2	BRACKET (MAIN R) ASSY	
116	X-3381-600-1	ARM (D. R) ASSY	
117	X-3381-365-1	ARM (U. R) ASSY	
118	3-243-373-01	SPRING (ARM. R)	
119	3-691-211-01	FELT	
M601	A-3315-622-A	MOTOR ASSY (FRONT PANEL OPEN/CLOSE)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#4	7-624-104-04	RETAINING, RING E-2	
#5	7-627-553-28	SCREW, PRECISION +P 2X2.5	
#6	7-624-106-04	STOP RING 3.0, TYPE-E	

7-4. HARD DISK, POWER BOARD SECTION



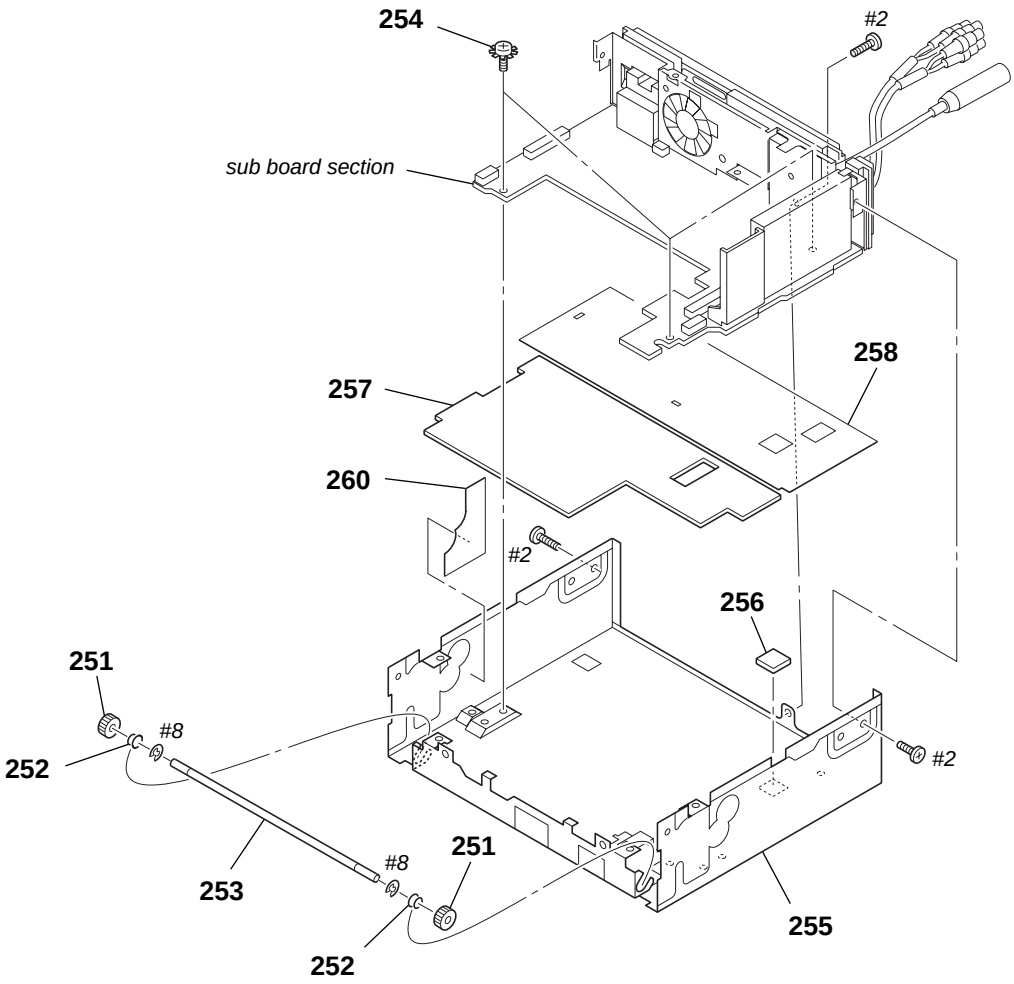
Ref. No.	Part No.	Description	Remark
151	3-242-852-01	SHEET (FP), PROTECTION	
152	4-635-301-01	SCREW M3X4	
153	3-238-882-01	BRACKET (H)	
154	3-244-648-02	SHEET (B), VIBRATION	
155	3-242-833-01	SHEET (H), INSULATING	
156	1-477-305-11	UNIT, HARD DISK DRIVE (2.5inch)	
157	1-761-552-11	MOUNTED PWB (HDD CONNECTOR)	
158	A-3274-304-A	POWER BOARD, COMPLETE	
159	3-238-888-01	SHIELD (DC1)	
160	3-242-212-01	SHEET (IC3), RADIATION	
161	3-238-889-01	SHIELD (DC2)	
162	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
163	1-824-053-11	CABLE, FLEXIBLE FLAT 50P	
164	3-244-641-32	SHEET (A), VIBRATION	
165	3-245-299-01	SHEET (DC), INSULATING	
#7	7-621-775-10	SCREW +B 2.6X4	

7-5. MAIN BOARD SECTION



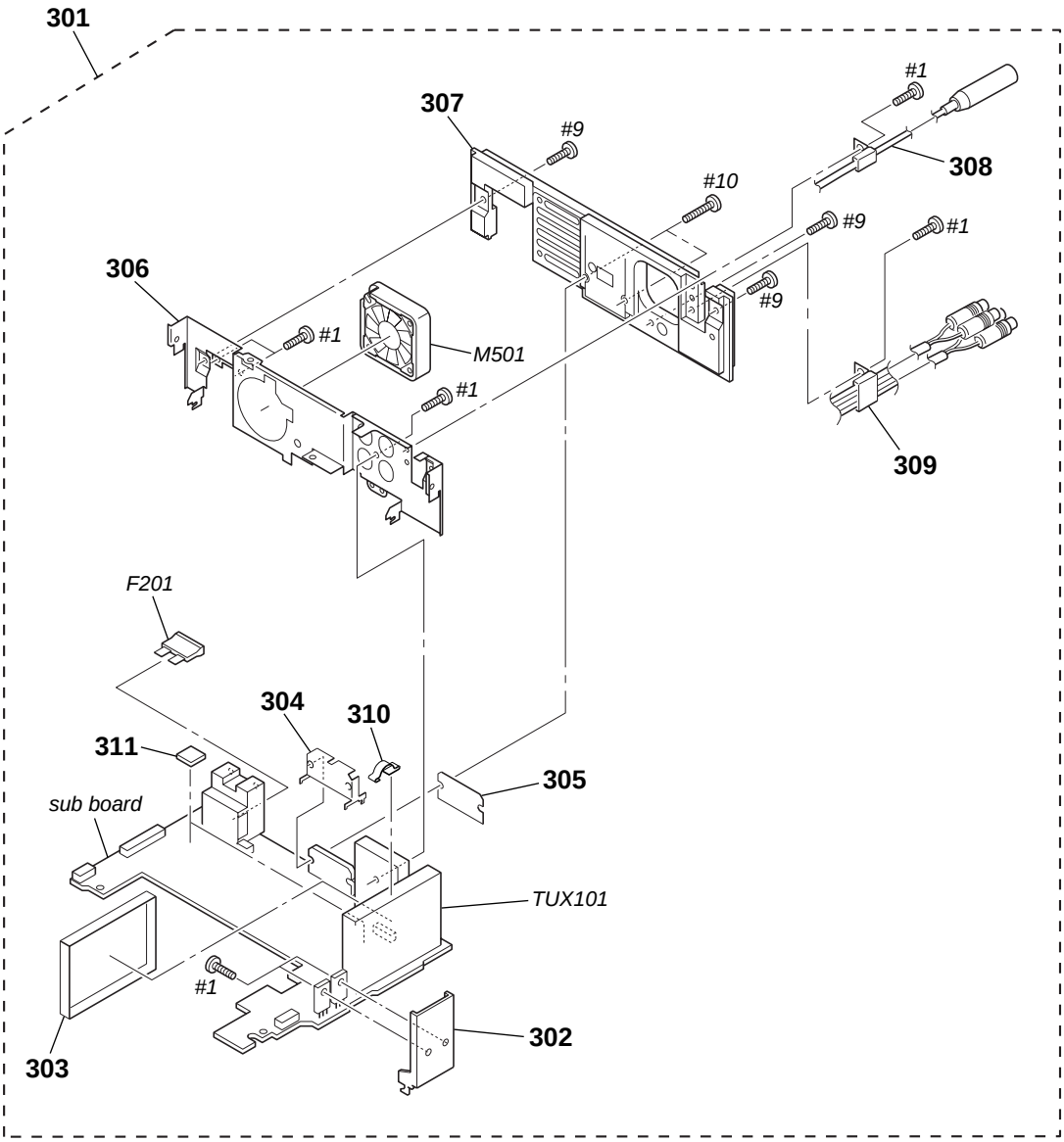
Ref. No.	Part No.	Description	Remark
201	A-3274-357-A	MAIN BOARD, COMPLETE	
202	3-242-832-01	SHEET (MS), INSULATING	
203	3-242-830-01	SHEET (40P), INSULATING	
204	3-242-831-01	SHEET (20P), INSULATING	
205	3-238-883-01	SHIELD (TOP)	
206	3-243-906-01	SHEET (IC4), RADIATION	
207	3-242-942-01	CUSHION (INDICATOR)	
208	3-242-210-01	SHEET (IC1), RADIATION	
209	3-238-884-01	SHIELD (BOTTOM)	
210	3-242-211-01	SHEET (IC2), RADIATION	

7-6. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
251	3-230-493-01	GEAR (DRIVE SHAFT)	
252	3-230-444-01	GUIDE (DRIVE SHAFT)	
253	3-243-674-01	SHAFT, DRIVE	
254	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
255	X-3382-068-1	CHASSIS ASSY	
256	3-242-211-01	SHEET (IC2), RADIATION	
257	3-242-208-01	SHEET (S), DAMPER	
258	3-242-834-01	SHEET (S), INSULATING	
260	3-244-637-01	SHEET (CHASSIS)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#8	7-624-118-01	RING, RETAINING E-2.5	

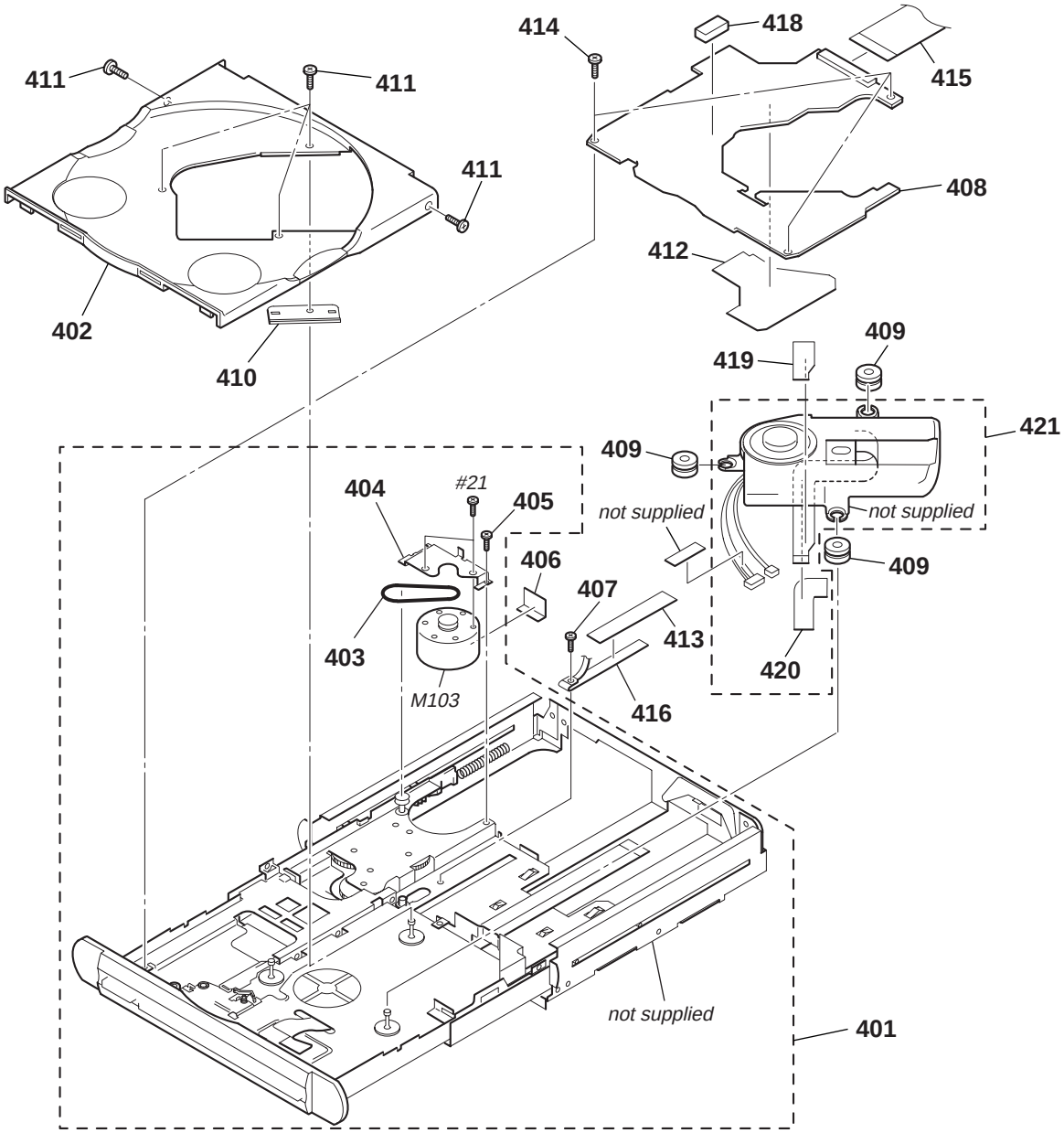
7-7. SUB BOARD SECTION



Ref. No.	Part No.	Description	Remark
301	A-3274-314-A	SUB BOARD, COMPLETE	
302	3-238-885-01	HEAT SINK (R)	
* 303	3-048-454-01	SHIELD (COVER)	
* 304	3-019-565-01	BRACKET (IC)	
305	3-242-209-01	SHEET (PWIC), RADIATION	
306	3-238-881-01	CHASSIS, BACK	
307	3-238-887-01	HEAT SINK	
308	1-824-055-11	CORD, CONNECTION (ANT)	
309	1-824-052-11	CORD, CONNECTION (AUX) (AUX IN/SUB OUT)	

Ref. No.	Part No.	Description	Remark
310	3-244-647-01	STICK FINGER	
311	3-244-641-02	SHEET (A), VIBRATION	
F201	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
M501	1-763-834-11	FAN, DC	
TUX101	A-3220-812-A	TUNER UNIT (TUX-020)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#9	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#10	7-685-797-09	SCREW +PTT 2.6X16 (S)	

7-8. MECHANISM DECK SECTION (MG-550D-156)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
401	A-3315-827-A	SERVICE ASSY, BLOCK (D)	
402	X-3381-034-6	TRAY (UD) ASSY	
403	3-234-336-01	BELT (L)	
404	3-234-348-01	BRACKET (MOTOR)	
405	4-639-357-21	SCREW (M1.7)	
406	3-244-139-01	CUSHION (MOTOR), SARANNET	
407	3-236-897-01	SCREW (+P M1.4 MECH)	
408	A-3274-561-A	SERVO BOARD, COMPLETE (for SERVICE)	
409	3-235-473-01	INSULATOR	
410	3-235-552-02	SPRING (LC-D), LEAF	
411	2-134-636-31	SCREW (M1.7X2.5)	
412	3-236-286-01	COVER (BOARD)	

Ref. No.	Part No.	Description	Remark
413	3-241-004-02	CUSHION (FPC), SARANET	
414	4-628-646-11	SCREW (M2X3.5), TOOTHED LOCK (+) P	
415	1-683-084-11	D40P FLEXIBLE BOARD	
416	1-763-734-12	MOTOR FLEXIBLE BOARD	
418	3-243-340-01	CUSHION (PWB)	
419	3-237-654-01	COVER (OP-FPC)	
420	3-225-647-01	SHEET (MD), ADHESIVE	
⚠421	A-3013-977-A	OP ASSY (CDM-3021EBG)	
M103	A-3315-830-A	SERVICE ASSY, LE MOTOR (TRAY OPEN/CLOSE)	
#21	7-627-000-11	SCREW, PRECISION +P 1.7X2 TYPE3	

SECTION 8
ELECTRICAL PARTS LIST

DISPLAY

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		DISPLAY BOARD, COMPLETE			
		**********			
*	3-227-281-02	CASE (IR-B) , SHIELD			
	3-238-971-01	SPACER (FL)			
	3-241-691-01	CASE (IR-T) , SHIELD			
	3-241-692-01	INSULATED PLATE (IR)			
	3-242-615-01	SPACER (IR)			
	3-244-135-01	SHEET (CONNECTOR)			
		< CAPACITOR >			
C901	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C902	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C903	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C904	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C905	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C906	1-135-852-21	ELECT CHIP	22uF	20%	6.3V
C907	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C908	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C909	1-135-852-21	ELECT CHIP	22uF	20%	6.3V
C910	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C911	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C912	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C913	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C914	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C915	1-135-972-21	ELECT CHIP	2.2uF	20%	50V
C918	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C919	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C920	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C921	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
		< CONNECTOR >			
CN901	1-778-183-11	PLUG, CONNECTOR 18P			
		< DIODE >			
D904	8-719-083-14	PHOTO DIODE RRX9000-0501 (REMOTE CONTROL RECEIVER)			
D905	8-719-420-90	DIODE MA8051-M-TX			
D906	8-719-404-50	DIODE MA111-TX			
D907	8-719-404-50	DIODE MA111-TX			
D921	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D922	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D923	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D924	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D925	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D926	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D927	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D928	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D929	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D930	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D931	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D932	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D933	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D934	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D935	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D936	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D937	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D938	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D939	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D940	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D941	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D942	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D943	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D944	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D945	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D946	8-719-065-17	DIODE 02DZ6.8-X (TPH3)			
D947	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D950	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
D951	8-719-080-04	LED CL-190UB-X-T (KEY ILLUMINATION)			
		< ROTARY ENCODER >			
ENC900	1-475-235-31	ENCODER, ROTARY (VOL, PUSH SOUND)			
ENC901	1-475-235-31	ENCODER, ROTARY (⏮ – +⏭, PUSH LIST)			
		< FERRITE BEAD >			
FB900	1-414-235-22	FERRITE	0uH		
FB901	1-414-235-22	FERRITE	0uH		
FB911	1-414-235-22	FERRITE	0uH		
FB912	1-414-235-22	FERRITE	0uH		
FB913	1-414-235-22	FERRITE	0uH		
FB914	1-414-235-22	FERRITE	0uH		
		< FLUORESCENT INDICATOR TUBE >			
FL900	1-518-814-11	INDICATOR TUBE, FLUORESCENT			

DISPLAY MAIN

Ref. No.	Part No.	Description			Remark
		< IC >			
IC901	8-759-268-33	IC SN74HC595ADBR			
IC902	8-759-830-18	IC RRX9000-0601#1			
IC903	8-759-830-17	IC RRX9000-0401R#01			
IC904	8-759-651-81	IC XC61FN4012MR			
		< SWITCH >			
LSW901	1-786-350-21	SWITCH, TACT (WITH LED) (CD ▶ HDD, ● REC)			
		< TRANSISTOR >			
Q900	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		
Q901	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		
Q909	8-729-106-60	TRANSISTOR	2SB1132-T101-QR		
Q910	8-729-901-21	TRANSISTOR	DTC144EK-T146		
Q911	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		
		< RESISTOR >			
R902	1-216-047-00	RES-CHIP	820	5%	1/10W
R903	1-216-845-11	RES-CHIP	100K	5%	1/10W
R904	1-216-864-11	SHORT CHIP	0		
R905	1-216-047-00	RES-CHIP	820	5%	1/10W
R906	1-216-864-11	SHORT CHIP	0		
R907	1-218-879-11	RES-CHIP	22K	2%	1/16W
R908	1-218-875-11	RES-CHIP	15K	2%	1/16W
R910	1-218-871-11	RES-CHIP	10K	2%	1/16W
R911	1-218-867-11	RES-CHIP	6.8K	2%	1/16W
R912	1-218-863-11	RES-CHIP	4.7K	2%	1/16W
R913	1-218-859-11	RES-CHIP	3.3K	2%	1/16W
R914	1-218-855-11	RES-CHIP	2.2K	2%	1/16W
R915	1-218-851-11	RES-CHIP	1.5K	2%	1/16W
R916	1-216-037-00	RES-CHIP	330	5%	1/10W
R917	1-218-851-11	RES-CHIP	1.5K	2%	1/16W
R918	1-216-037-00	RES-CHIP	330	5%	1/10W
R919	1-218-847-11	RES-CHIP	1K	2%	1/16W
R920	1-216-850-11	RES-CHIP	270K	5%	1/10W
R921	1-216-845-11	RES-CHIP	100K	5%	1/10W
R922	1-219-286-11	RES-CHIP	680	2%	1/16W
R923	1-219-286-11	RES-CHIP	680	2%	1/16W
R924	1-216-857-11	RES-CHIP	1M	5%	1/10W
R925	1-216-817-11	RES-CHIP	470	5%	1/10W
R926	1-216-797-11	RES-CHIP	10	5%	1/10W
R927	1-216-821-11	RES-CHIP	1K	5%	1/10W
R929	1-216-845-11	RES-CHIP	100K	5%	1/10W
R930	1-216-845-11	RES-CHIP	100K	5%	1/10W
R931	1-216-845-11	RES-CHIP	100K	5%	1/10W
R932	1-216-845-11	RES-CHIP	100K	5%	1/10W
R933	1-216-845-11	RES-CHIP	100K	5%	1/10W
R934	1-216-845-11	RES-CHIP	100K	5%	1/10W
R935	1-219-286-11	RES-CHIP	680	2%	1/16W
R936	1-216-821-11	RES-CHIP	1K	5%	1/10W
R937	1-216-821-11	RES-CHIP	1K	5%	1/10W
R938	1-216-821-11	RES-CHIP	1K	5%	1/10W
R939	1-216-821-11	RES-CHIP	1K	5%	1/10W
R940	1-216-296-00	SHORT CHIP	0		
R943	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R944	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R945	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R946	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R947	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R948	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R949	1-216-797-11	RES-CHIP	10	5%	1/10W
R951	1-216-033-00	RES-CHIP	220	5%	1/10W
R952	1-216-033-00	RES-CHIP	220	5%	1/10W
R953	1-216-033-00	RES-CHIP	220	5%	1/10W
R954	1-216-033-00	RES-CHIP	220	5%	1/10W
R955	1-216-033-00	RES-CHIP	220	5%	1/10W
R956	1-216-033-00	RES-CHIP	220	5%	1/10W
R957	1-216-033-00	RES-CHIP	220	5%	1/10W
R958	1-216-033-00	RES-CHIP	220	5%	1/10W
R959	1-216-033-00	RES-CHIP	220	5%	1/10W
R982	1-216-047-00	RES-CHIP	820	5%	1/10W
R983	1-216-047-00	RES-CHIP	820	5%	1/10W
R989	1-216-295-00	SHORT CHIP	0		
R991	1-216-864-11	SHORT CHIP	0		
R992	1-216-809-11	METAL CHIP	100	5%	1/10W
R993	1-216-864-11	SHORT CHIP	0		
R994	1-216-864-11	SHORT CHIP	0		
R995	1-216-864-11	SHORT CHIP	0		
R996	1-216-833-11	RES-CHIP	10K	5%	1/10W
R997	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R998	1-216-045-00	RES-CHIP	680	5%	1/10W
R999	1-216-045-00	RES-CHIP	680	5%	1/10W
		< SWITCH >			
S901	1-771-884-11	SWITCH, TACTILE (WITH LED) (DSPL)			
S902	1-771-884-11	SWITCH, TACTILE (WITH LED) (FUNCTION, F)			
S903	1-771-884-11	SWITCH, TACTILE (WITH LED) (F1)			
S904	1-771-884-11	SWITCH, TACTILE (WITH LED) (F2)			
S905	1-771-884-11	SWITCH, TACTILE (WITH LED) (F3)			
S906	1-771-884-11	SWITCH, TACTILE (WITH LED) (MENU, M)			
S907	1-771-884-11	SWITCH, TACTILE (WITH LED) (CD ⏏)			
S908	1-771-884-11	SWITCH, TACTILE (WITH LED) (CLOSE, OPEN)			
S909	1-771-884-11	SWITCH, TACTILE (WITH LED) (SOURCE)			
S910	1-771-884-11	SWITCH, TACTILE (WITH LED) (OFF)			
		< VIBRATOR >			
X900	1-781-646-21	VIBRATOR, CERAMIC (4MHz)			
**********					
	A-3274-357-A	MAIN BOARD, COMPLETE			
		**********			
	3-238-883-01	SHIELD (TOP)			
	3-238-884-01	SHIELD (BOTTOM)			
	3-242-210-01	SHEET (IC1) , RADIATION			
	3-242-211-01	SHEET (IC2) , RADIATION			
	3-242-830-01	SHEET (40P) , INSULATING			
	3-242-831-01	SHEET (20P) , INSULATING			
	3-242-832-01	SHEET (MS) , INSULATING			
	3-242-942-01	INDICATOR			
	3-243-906-01	SHEET (IC4), RADIATION			
		< TERMINAL >			
BN1057	1-694-592-31	TERMINAL			
BN1058	1-694-592-31	TERMINAL			
BN1060	1-694-592-31	TERMINAL			

Ref. No.	Part No.	Description			Remark
BN1061	1-694-592-31	TERMINAL			
BN1062	1-694-592-31	TERMINAL			
BN1063	1-694-592-31	TERMINAL			
BN1064	1-694-592-31	TERMINAL			
BN1065	1-694-592-31	TERMINAL			
BN1066	1-694-592-31	TERMINAL			
BN1067	1-694-592-31	TERMINAL			
BN1068	1-694-592-31	TERMINAL			
BN1069	1-694-592-31	TERMINAL			
BN1070	1-694-592-31	TERMINAL			
BN1071	1-694-592-31	TERMINAL			
		< CAPACITOR >			
C371	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C372	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C373	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C374	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C375	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C376	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C381	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
C391	1-127-692-11	CERAMIC CHIP	10uF	10%	6.3V
C411	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C412	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C413	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C451	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C452	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C651	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C652	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1000	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1001	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1002	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1003	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1004	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1005	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1006	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1007	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1008	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1009	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1010	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1011	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1013	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1015	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1016	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1017	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C1018	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1020	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1021	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1022	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C1023	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C1024	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1025	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C1026	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C1027	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1028	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1029	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1031	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1032	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1033	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1034	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1035	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1036	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1037	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1038	1-110-569-21	TANTALUM CHIP	47uF	20%	4V
C1043	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C1044	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C1047	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1050	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1051	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1055	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C1101	1-110-569-11	TANTALUM CHIP	47uF	20%	6.3V
C1108	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C1109	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2001	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2002	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2003	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2004	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2006	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2008	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2009	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2010	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2013	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2014	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2015	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2016	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2017	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C2018	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2020	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2021	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2022	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2023	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2026	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2027	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2028	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2029	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2030	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2031	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2032	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2034	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2035	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2036	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2037	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2038	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2039	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2040	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2041	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2042	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2043	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2044	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2045	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2046	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2047	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2048	1-162-923-11	CERAMIC CHIP	47PF	5%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C2049	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2050	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2051	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2052	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2053	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2054	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2055	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2056	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2057	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2058	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2059	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2060	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2061	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2062	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2063	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2064	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2065	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C2066	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C2067	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C2068	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C2069	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C2100	1-135-856-11	TANTALUM CHIP	100uF	20%	10V
C2101	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2102	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C2103	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2105	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C2106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2107	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2108	1-135-856-11	TANTALUM CHIP	100uF	20%	10V
C2109	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2110	1-135-856-11	TANTALUM CHIP	100uF	20%	10V
C2120	1-135-856-11	TANTALUM CHIP	100uF	20%	10V
C2121	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2122	1-135-856-11	TANTALUM CHIP	100uF	20%	10V
C2123	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2124	1-135-856-11	TANTALUM CHIP	100uF	20%	10V
C2125	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3000	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3001	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3003	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3004	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3005	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3006	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3007	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3008	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3009	1-104-700-11	CERAMIC CHIP	0.027uF	10%	16V
C3010	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3011	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C3012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3013	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3014	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3015	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3016	1-110-569-11	TANTALUM CHIP	47uF	20%	6.3V
C3017	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3018	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3020	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3021	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3022	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C3023	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3024	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3026	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3027	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3028	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3029	1-110-569-11	TANTALUM CHIP	47uF	20%	6.3V
C3030	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3031	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3032	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3033	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3034	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3035	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3036	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3037	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3038	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3039	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3040	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3041	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3042	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3043	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3044	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3045	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3046	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C3047	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3048	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3050	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3051	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3052	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3062	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3063	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3064	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3065	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3066	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3067	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3068	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3069	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3070	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3071	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3073	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3074	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3075	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3076	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3077	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4001	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4002	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4003	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4004	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4005	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C4006	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C4007	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4008	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4009	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C4010	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C4011	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4013	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C4014	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4015	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4016	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4017	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4018	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4019	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4020	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4021	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4022	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4023	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4026	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4028	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C4029	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C4030	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C4031	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C4032	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C4033	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C4107	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C4108	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C4201	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4202	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C4203	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C4301	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4303	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C4304	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C4305	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4306	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4307	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C4308	1-119-750-11	TANTALUM CHIP	22uF	20%	6.3V
C4310	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4311	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C4312	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C4315	1-113-642-11	TANTALUM CHIP	47uF	20%	10V
C5001	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C5002	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5003	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C5004	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5005	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5006	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
* CN1010	1-779-056-21	PIN, CONNECTOR (PC BOARD) 5P			
* CN2001	1-785-613-11	CONNECTOR, FFC/FPC 50P			
CN2002	1-779-522-21	CONNECTOR, FFC (ZIF) 40P			
CN2003	1-816-543-11	CONNECTOR, FFC/FPC			
CN3001	1-816-500-11	CONNECTOR, BOARD TO BOARD 22P			
* CN3002	1-785-613-11	CONNECTOR, FFC/FPC 50P			
CN4101	1-785-804-21	CONNECTOR, MINIATURE (I/O)			
CN4201	1-816-510-11	CONNECTOR, MS (PUSH.PUSH) (MEMORY STICK)			
		< DIODE >			
D411	8-719-820-05	DIODE MA152WA-TX			
D2000	8-719-038-03	LED CL-190Y-CD-T (HDD)			
D2001	8-719-404-50	DIODE MA111-TX			
D4201	8-719-038-03	LED CL-190Y-CD-T (MEMORY STICK)			
D4202	8-719-038-03	LED CL-190Y-CD-T (I/O)			
D4203	8-719-079-10	LED CL-220UB-X-TS (MEMORY STICK SLOT ILLUMINATION)			
D4204	8-719-079-10	LED CL-220UB-X-TS (MEMORY STICK SLOT ILLUMINATION)			
D4205	8-719-404-50	DIODE MA111-TX			
D4206	8-719-404-50	DIODE MA111-TX			
		< FERRITE BEAD >			
FB1001	1-414-595-11	FERRITE	0uH		
FB1002	1-414-595-11	FERRITE	0uH		
FB1003	1-414-595-11	FERRITE	0uH		
FB1005	1-469-835-21	FERRITE	0uH		
FB1006	1-469-835-21	FERRITE	0uH		
FB1007	1-469-835-21	FERRITE	0uH		
FB1026	1-414-228-11	FERRITE	0uH		
FB1064	1-414-921-11	FERRITE	0uH		
FB2002	1-469-094-21	FERRITE	0uH		
FB2003	1-469-094-21	FERRITE	0uH		
FB2004	1-469-094-21	FERRITE	0uH		
FB2005	1-469-094-21	FERRITE	0uH		
FB2006	1-469-094-21	FERRITE	0uH		
FB2007	1-469-094-21	FERRITE	0uH		
FB2008	1-469-094-21	FERRITE	0uH		
FB2009	1-469-094-21	FERRITE	0uH		
FB2010	1-469-094-21	FERRITE	0uH		
FB2011	1-469-094-21	FERRITE	0uH		
FB2012	1-469-094-21	FERRITE	0uH		
FB2013	1-469-094-21	FERRITE	0uH		
FB2014	1-469-094-21	FERRITE	0uH		
FB2015	1-469-094-21	FERRITE	0uH		
FB2016	1-469-094-21	FERRITE	0uH		
FB2017	1-469-094-21	FERRITE	0uH		
FB2019	1-469-094-21	FERRITE	0uH		
FB2020	1-469-094-21	FERRITE	0uH		
FB2021	1-469-094-21	FERRITE	0uH		
FB2022	1-469-094-21	FERRITE	0uH		
FB2023	1-469-094-21	FERRITE	0uH		
FB2024	1-469-094-21	FERRITE	0uH		
FB2025	1-469-094-21	FERRITE	0uH		
FB2026	1-469-094-21	FERRITE	0uH		
FB2027	1-469-094-21	FERRITE	0uH		
FB2028	1-469-094-21	FERRITE	0uH		
FB2029	1-469-094-21	FERRITE	0uH		
FB2102	1-400-050-11	FERRITE	0uH		
FB2103	1-400-050-11	FERRITE	0uH		
FB2104	1-400-050-11	FERRITE	0uH		
FB3000	1-400-050-11	FERRITE	0uH		
FB3001	1-400-050-11	FERRITE	0uH		
FB3002	1-400-050-11	FERRITE	0uH		
FB3004	1-414-228-11	FERRITE	0uH		
FB3041	1-414-921-11	FERRITE	0uH		
FB3042	1-414-921-11	FERRITE	0uH		
FB3043	1-414-921-11	FERRITE	0uH		
FB3044	1-414-921-11	FERRITE	0uH		
FB3045	1-414-921-11	FERRITE	0uH		
FB3046	1-414-921-11	FERRITE	0uH		
FB3047	1-414-921-11	FERRITE	0uH		
FB3048	1-469-836-21	FERRITE	0uH		

MAIN

Ref. No.	Part No.	Description		Remark
FB4001	1-400-050-11	FERRITE	0uH	
FB4002	1-400-050-11	FERRITE	0uH	
FB4301	1-400-050-11	FERRITE	0uH	
FB5001	1-414-228-11	FERRITE	0uH	
FB5002	1-469-094-21	FERRITE	0uH	
FB5003	1-469-094-21	FERRITE	0uH	
FB5004	1-469-094-21	FERRITE	0uH	
FB5005	1-469-094-21	FERRITE	0uH	
FB5006	1-469-094-21	FERRITE	0uH	
FB5007	1-469-094-21	FERRITE	0uH	
FB5008	1-469-094-21	FERRITE	0uH	
		< FILTER >		
FL1000	1-400-259-21	FILTER, EMI		
FL1001	1-400-259-21	FILTER, EMI		
FL1002	1-400-259-21	FILTER, EMI		
FL2000	1-400-259-21	FILTER, EMI		
FL2001	1-400-259-21	FILTER, EMI		
FL2101	1-400-259-21	FILTER, EMI		
FL2105	1-400-259-21	FILTER, EMI		
FL3002	1-400-259-21	FILTER, EMI		
FL3003	1-400-259-21	FILTER, EMI		
FL4000	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
FL4001	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
FL4002	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
FL4003	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
FL5001	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
FL5002	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
FL5003	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
FL5004	1-234-561-21	FILTER, EMI REMOVAL (SMD)		
		< IC >		
IC371	8-759-825-13	IC PCM1748E/2K		
IC411	8-759-527-33	IC LB1930M-TLM		
IC412	8-759-075-66	IC TA75S01F (TE85R)		
IC601	8-759-497-44	IC TC7WH125FU (TE12R)		
IC602	8-759-688-12	IC TC74VHCT125AFT (EL)		
IC1010	8-759-657-93	IC HD6417709AF133		
IC1020	6-702-270-01	IC K4S281632D-TI75		
IC1030	6-801-643-01	IC MBM29DL640E-90TN-1HDU		
IC2001	6-701-120-01	IC W981616BH-7-EL10		
* IC2003	6-700-928-01	IC CXD9533Q		
IC3000	6-800-664-01	IC XC9536XL-5VQ44C-HB01		
* IC3001	6-700-927-01	IC TPS77818PWPR		
@ IC3003	6-700-237-01	IC TMS320C6211GFN167		
IC3005	8-759-653-54	IC XC62GR3312MR		
@ IC4001	8-752-413-97	IC CXD1859AGA		
IC4002	8-752-405-25	IC CXK2000EN-T2		
* IC4301	6-701-101-01	IC ISP1161BD-118		
IC5001	6-801-645-01	IC XC9572XL-10VQ44C-FL11		
IC5002	6-702-275-01	IC LTC1799CS5#TR		
		< COIL >		
L351	1-412-002-31	INDUCTOR	4.7uH	
L352	1-412-002-31	INDUCTOR	4.7uH	
L4201	1-469-525-11	INDUCTOR	10uH	

Ref. No.	Part No.	Description			Remark
		< THERMISTOR >			
PS4100	1-533-817-21	THERMISTOR			
		< TRANSISTOR >			
Q3000	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q4201	8-729-051-23	TRANSISTOR	2SA2018TL		
Q4202	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q4203	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q4204	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
		< RESISTOR/FILTER >			
R331	1-216-295-00	SHORT CHIP	0		
R371	1-216-864-11	SHORT CHIP	0		
R372	1-216-864-11	SHORT CHIP	0		
R373	1-216-864-11	SHORT CHIP	0		
R374	1-216-864-11	SHORT CHIP	0		
R375	1-216-864-11	SHORT CHIP	0		
R401	1-218-236-11	RES-CHIP	1	10%	1/4W
R402	1-218-236-11	RES-CHIP	1	10%	1/4W
R403	1-216-833-11	RES-CHIP	10K	5%	1/10W
R404	1-216-845-11	RES-CHIP	100K	5%	1/10W
R405	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R406	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R653	1-216-864-11	SHORT CHIP	0		
R654	1-216-841-11	RES-CHIP	47K	5%	1/10W
R655	1-216-864-11	SHORT CHIP	0		
R656	1-216-841-11	RES-CHIP	47K	5%	1/10W
R657	1-216-841-11	RES-CHIP	47K	5%	1/10W
R658	1-216-864-11	SHORT CHIP	0		
R659	1-216-864-11	SHORT CHIP	0		
R1000	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1001	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1002	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1003	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1004	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1005	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1007	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1008	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1009	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1010	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1011	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1012	1-216-803-11	RES-CHIP	33	5%	1/10W
R1013	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1014	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1015	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1016	1-216-864-11	SHORT CHIP	0		
R1017	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1019	1-216-864-11	SHORT CHIP	0		
R1020	1-216-864-11	SHORT CHIP	0		
R1022	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1024	1-216-803-11	RES-CHIP	33	5%	1/10W
R1025	1-216-864-11	SHORT CHIP	0		
R1033	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1034	1-216-864-11	SHORT CHIP	0		
R1035	1-216-864-11	SHORT CHIP	0		
R1037	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1038	1-216-845-11	RES-CHIP	100K	5%	1/10W

@ Replacement of IC3003 and IC4001 used in this set requires a special tool.

Ref. No.	Part No.	Description			Remark
R1050	1-216-864-11	SHORT CHIP	0		
R1051	1-216-864-11	SHORT CHIP	0		
R1052	1-216-864-11	SHORT CHIP	0		
R1053	1-216-864-11	SHORT CHIP	0		
R1054	1-216-864-11	SHORT CHIP	0		
R1062	1-216-864-11	SHORT CHIP	0		
R1063	1-216-864-11	SHORT CHIP	0		
R1065	1-216-864-11	SHORT CHIP	0		
R1068	1-216-864-11	SHORT CHIP	0		
R1069	1-216-864-11	SHORT CHIP	0		
R1070	1-216-864-11	SHORT CHIP	0		
R1071	1-216-864-11	SHORT CHIP	0		
R1072	1-216-864-11	SHORT CHIP	0		
R1073	1-216-864-11	SHORT CHIP	0		
R1074	1-216-864-11	SHORT CHIP	0		
R1076	1-216-864-11	SHORT CHIP	0		
R1077	1-216-864-11	SHORT CHIP	0		
R1078	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1080	1-216-864-11	SHORT CHIP	0		
R1081	1-216-864-11	SHORT CHIP	0		
R1082	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1083	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1084	1-216-864-11	SHORT CHIP	0		
R1085	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1086	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1087	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1088	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1089	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1101	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1102	1-216-803-11	RES-CHIP	33	5%	1/10W
R1103	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R1104	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1105	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1106	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1107	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1110	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1111	1-216-801-11	RES-CHIP	22	5%	1/10W
R1112	1-216-801-11	RES-CHIP	22	5%	1/10W
R1113	1-216-845-11	RES-CHIP	100K	5%	1/10W
R1114	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1115	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1116	1-216-833-11	RES-CHIP	10K	5%	1/10W
R1118	1-216-864-11	SHORT CHIP	0		
R2002	1-216-864-11	SHORT CHIP	0		
R2003	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R2004	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2005	1-216-864-11	SHORT CHIP	0		
R2009	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2010	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2011	1-216-801-11	RES-CHIP	22	5%	1/10W
R2012	1-216-801-11	RES-CHIP	22	5%	1/10W
R2013	1-216-801-11	RES-CHIP	22	5%	1/10W
R2014	1-216-801-11	RES-CHIP	22	5%	1/10W
R2015	1-216-801-11	RES-CHIP	22	5%	1/10W
R2016	1-216-801-11	RES-CHIP	22	5%	1/10W
R2017	1-216-801-11	RES-CHIP	22	5%	1/10W
R2018	1-216-801-11	RES-CHIP	22	5%	1/10W
R2019	1-216-801-11	RES-CHIP	22	5%	1/10W
R2020	1-216-801-11	RES-CHIP	22	5%	1/10W
R2021	1-216-801-11	RES-CHIP	22	5%	1/10W
R2022	1-216-801-11	RES-CHIP	22	5%	1/10W
R2023	1-216-801-11	RES-CHIP	22	5%	1/10W
R2024	1-216-801-11	RES-CHIP	22	5%	1/10W
R2025	1-216-801-11	RES-CHIP	22	5%	1/10W
R2026	1-216-801-11	RES-CHIP	22	5%	1/10W
R2027	1-216-801-11	RES-CHIP	22	5%	1/10W
R2028	1-216-801-11	RES-CHIP	22	5%	1/10W
R2029	1-216-801-11	RES-CHIP	22	5%	1/10W
R2030	1-216-801-11	RES-CHIP	22	5%	1/10W
R2031	1-216-801-11	RES-CHIP	22	5%	1/10W
R2032	1-216-801-11	RES-CHIP	22	5%	1/10W
R2033	1-216-801-11	RES-CHIP	22	5%	1/10W
R2034	1-216-801-11	RES-CHIP	22	5%	1/10W
R2035	1-216-801-11	RES-CHIP	22	5%	1/10W
R2036	1-216-801-11	RES-CHIP	22	5%	1/10W
R2037	1-216-801-11	RES-CHIP	22	5%	1/10W
R2038	1-216-801-11	RES-CHIP	22	5%	1/10W
R2039	1-216-801-11	RES-CHIP	22	5%	1/10W
R2040	1-216-801-11	RES-CHIP	22	5%	1/10W
R2041	1-216-801-11	RES-CHIP	22	5%	1/10W
R2042	1-216-801-11	RES-CHIP	22	5%	1/10W
R2043	1-216-808-11	RES-CHIP	82	5%	1/10W
R2044	1-216-808-11	RES-CHIP	82	5%	1/10W
R2045	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R2046	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R2047	1-216-808-11	RES-CHIP	82	5%	1/10W
R2048	1-216-808-11	RES-CHIP	82	5%	1/10W
R2049	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2050	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2051	1-216-808-11	RES-CHIP	82	5%	1/10W
R2052	1-216-808-11	RES-CHIP	82	5%	1/10W
R2053	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2054	1-216-801-11	RES-CHIP	22	5%	1/10W
R2055	1-216-801-11	RES-CHIP	22	5%	1/10W
R2056	1-216-801-11	RES-CHIP	22	5%	1/10W
R2057	1-216-801-11	RES-CHIP	22	5%	1/10W
R2058	1-216-801-11	RES-CHIP	22	5%	1/10W
R2059	1-216-801-11	RES-CHIP	22	5%	1/10W
R2060	1-216-808-11	RES-CHIP	82	5%	1/10W
R2061	1-216-808-11	RES-CHIP	82	5%	1/10W
R2062	1-216-821-11	RES-CHIP	1K	5%	1/10W
R2063	1-216-801-11	RES-CHIP	22	5%	1/10W
R2064	1-216-801-11	RES-CHIP	22	5%	1/10W
R2065	1-216-801-11	RES-CHIP	22	5%	1/10W
R2066	1-216-801-11	RES-CHIP	22	5%	1/10W
R2067	1-216-801-11	RES-CHIP	22	5%	1/10W
R2068	1-216-801-11	RES-CHIP	22	5%	1/10W
R2069	1-216-815-11	RES-CHIP	330	5%	1/10W
R2071	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2072	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2073	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2074	1-400-259-21	FILTER, EMI			
R2076	1-216-803-11	RES-CHIP	33	5%	1/10W
R2077	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2078	1-216-833-11	RES-CHIP	10K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R2079	1-216-833-11	RES-CHIP	10K	5%	1/10W
R2080	1-216-841-11	RES-CHIP	47K	5%	1/10W
R2100	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3000	1-216-864-11	SHORT CHIP	0		
R3001	1-216-841-11	RES-CHIP	47K	5%	1/10W
R3002	1-216-864-11	SHORT CHIP	0		
R3003	1-216-805-11	RES-CHIP	47	5%	1/10W
R3004	1-216-864-11	SHORT CHIP	0		
R3005	1-216-806-11	RES-CHIP	56	5%	1/10W
R3006	1-216-864-11	SHORT CHIP	0		
R3007	1-216-864-11	SHORT CHIP	0		
R3008	1-216-864-11	SHORT CHIP	0		
R3009	1-216-864-11	SHORT CHIP	0		
R3010	1-216-793-11	RES-CHIP	4.7	5%	1/10W
R3011	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3012	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3013	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3014	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3016	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3018	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3020	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3021	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3022	1-216-864-11	SHORT CHIP	0		
R3023	1-216-864-11	SHORT CHIP	0		
R3030	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3032	1-216-807-11	RES-CHIP	68	5%	1/10W
R3034	1-216-864-11	SHORT CHIP	0		
R3035	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3036	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3041	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3042	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3043	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3045	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3068	1-216-803-11	RES-CHIP	33	5%	1/10W
R4000	1-216-864-11	SHORT CHIP	0		
R4001	1-216-864-11	SHORT CHIP	0		
R4002	1-216-864-11	SHORT CHIP	0		
R4003	1-216-864-11	SHORT CHIP	0		
R4005	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4007	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4011	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4012	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4013	1-216-864-11	SHORT CHIP	0		
R4014	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4016	1-216-819-11	RES-CHIP	680	5%	1/10W
R4017	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4018	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4019	1-216-821-11	RES-CHIP	1K	5%	1/10W
R4021	1-216-845-11	RES-CHIP	100K	5%	1/10W
R4022	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4031	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R4032	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4033	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4034	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4035	1-216-805-11	RES-CHIP	47	5%	1/10W
R4041	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4046	1-216-805-11	RES-CHIP	47	5%	1/10W
R4047	1-216-805-11	RES-CHIP	47	5%	1/10W
R4048	1-216-805-11	RES-CHIP	47	5%	1/10W
R4049	1-216-845-11	RES-CHIP	100K	5%	1/10W
R4050	1-216-864-11	SHORT CHIP	0		
R4051	1-216-845-11	RES-CHIP	100K	5%	1/10W
R4052	1-216-864-11	SHORT CHIP	0		
R4053	1-216-864-11	SHORT CHIP	0		
R4109	1-216-803-11	RES-CHIP	33	5%	1/10W
R4110	1-216-803-11	RES-CHIP	33	5%	1/10W
R4111	1-216-835-11	RES-CHIP	15K	5%	1/10W
R4112	1-216-835-11	RES-CHIP	15K	5%	1/10W
R4201	1-216-864-11	SHORT CHIP	0		
R4202	1-216-845-11	RES-CHIP	100K	5%	1/10W
R4203	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4211	1-216-807-11	RES-CHIP	68	5%	1/10W
R4212	1-216-809-11	RES-CHIP	100	5%	1/10W
R4213	1-216-864-11	SHORT CHIP	0		
R4214	1-216-807-11	RES-CHIP	68	5%	1/10W
R4216	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4217	1-216-811-11	RES-CHIP	150	5%	1/10W
R4218	1-216-811-11	RES-CHIP	150	5%	1/10W
R4219	1-216-864-11	SHORT CHIP	0		
R4220	1-216-864-11	SHORT CHIP	0		
R4221	1-216-845-11	RES-CHIP	100K	5%	1/10W
R4223	1-216-815-11	RES-CHIP	330	5%	1/10W
R4301	1-216-864-11	SHORT CHIP	0		
R4302	1-216-864-11	SHORT CHIP	0		
R4303	1-216-864-11	SHORT CHIP	0		
R4304	1-216-864-11	SHORT CHIP	0		
R4305	1-216-864-11	SHORT CHIP	0		
R4307	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4308	1-216-864-11	SHORT CHIP	0		
R4311	1-216-864-11	SHORT CHIP	0		
R4312	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4313	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4315	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4317	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4318	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4321	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R4322	1-216-857-11	RES-CHIP	1M	5%	1/10W
R4323	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4324	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4327	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4328	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4330	1-216-864-11	SHORT CHIP	0		
R4331	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4332	1-216-833-11	RES-CHIP	10K	5%	1/10W
R4333	1-216-864-11	SHORT CHIP	0		
R4334	1-216-864-11	SHORT CHIP	0		
R4339	1-216-864-11	SHORT CHIP	0		
R5001	1-216-838-11	RES-CHIP	27K	5%	1/10W
R5005	1-216-809-11	RES-CHIP	100	5%	1/10W
R5007	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R5008	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R5009	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >			
RB1002	1-233-575-11	RES, CHIP NETWORK 22			

Ref. No.	Part No.	Description			Remark
RB1003	1-233-575-11	RES, CHIP NETWORK 22			
RB1004	1-233-575-11	RES, CHIP NETWORK 22			
RB1005	1-233-575-11	RES, CHIP NETWORK 22			
RB1006	1-233-575-11	RES, CHIP NETWORK 22			
RB1007	1-233-575-11	RES, CHIP NETWORK 22			
RB1008	1-233-575-11	RES, CHIP NETWORK 22			
RB1009	1-233-575-11	RES, CHIP NETWORK 22			
RB2000	1-233-575-11	RES, CHIP NETWORK 22			
RB2001	1-233-575-11	RES, CHIP NETWORK 22			
RB2002	1-233-575-11	RES, CHIP NETWORK 22			
RB2003	1-233-575-11	RES, CHIP NETWORK 22			
RB2004	1-233-575-11	RES, CHIP NETWORK 22			
RB2005	1-233-575-11	RES, CHIP NETWORK 22			
RB2006	1-233-575-11	RES, CHIP NETWORK 22			
RB2007	1-233-575-11	RES, CHIP NETWORK 22			
RB2008	1-233-575-11	RES, CHIP NETWORK 22			
RB2009	1-233-575-11	RES, CHIP NETWORK 22			
RB2010	1-233-575-11	RES, CHIP NETWORK 22			
RB2011	1-233-575-11	RES, CHIP NETWORK 22			
RB4001	1-233-575-11	RES, CHIP NETWORK 22			
RB4002	1-233-575-11	RES, CHIP NETWORK 22			
RB4003	1-233-575-11	RES, CHIP NETWORK 22			
RB4004	1-233-575-11	RES, CHIP NETWORK 22			
RB4005	1-233-575-11	RES, CHIP NETWORK 22			
RB4006	1-233-575-11	RES, CHIP NETWORK 22			
RB4007	1-233-575-11	RES, CHIP NETWORK 22			
RB4008	1-233-575-11	RES, CHIP NETWORK 22			
		< SWITCH >			
S4202	1-762-455-51	SWITCH, PUSH (1 KEY) (USB DETECT)			
		< COIL >			
T4101	1-456-074-11	COIL, COMMON MODE CHOKE			
		< VIBRATOR >			
* X1001	1-795-589-21	VIBRATOR, CRYSTAL (33.3333MHz)			
* X3002	1-795-431-21	OSCILLATOR, CRYSTAL (37.5MHz)			
X4001	1-767-722-21	VIBRATOR, CRYSTAL (22.579MHz)			
X4002	1-781-265-21	VIBRATOR, CRYSTAL (20MHz)			
* X4301	1-795-429-21	VIBRATOR, CRYSTAL (6MHz)			
**********					
	A-3274-304-A	POWER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C703	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C704	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C705	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C706	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C707	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C708	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C709	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C710	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C711	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C712	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C713	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C714	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C715	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C716	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C717	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C718	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C719	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C720	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C724	1-100-055-11	CERAMIC CHIP	22uF	20%	16V
C725	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C726	1-117-808-11	CERAMIC CHIP	10uF	10%	10V
C727	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C728	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C729	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C730	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C731	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C734	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C735	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C736	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C739	1-165-874-21	ELECT CHIP	120uF	20%	6.3V
C740	1-165-874-21	ELECT CHIP	120uF	20%	6.3V
C742	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C743	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C744	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C745	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C750	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C751	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C752	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C753	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C754	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C755	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C756	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C757	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C758	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C759	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C760	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C761	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN701	1-816-502-11	CONNECTOR, BOARD TO BOARD 22P			
CN702	1-816-501-11	CONNECTOR, BOARD TO BOARD 24P			
		< DIODE >			
D702	8-719-070-23	DIODE EP05Q03L-TE8L3			
D703	8-719-070-23	DIODE EP05Q03L-TE8L3			
D704	8-719-404-50	DIODE MA111-TX			
D705	8-719-422-41	DIODE MA8051-L-TX			
		< FILTER >			
FL701	1-234-498-21	FILTER, EMI			
		< IC/FET >			
IC701	8-759-597-57	IC LTC1628CG#TR			
* IC702	6-700-926-01	IC TPS77601PWPR			
IC703	8-759-829-80	IC XC62FP1802MR			
* IC704	8-729-053-80	FET SI4830DY-T1			
* IC705	8-729-053-80	FET SI4830DY-T1			
IC707	6-702-274-01	IC XC612N4644MR			
IC708	6-702-273-01	IC XC612N3129MR			

POWER **SERVO**

Ref. No.	Part No.	Description			Remark
IC709	6-702-272-01	IC XC612N2016MR			
IC711	8-759-598-41	IC TC7W32FK (TE85R)			
IC712	8-759-523-08	IC TC74AC08FT (EL)			
IC713	6-702-271-01	IC XC612N1917MR			
		< COIL >			
L701	1-419-878-21	COIL, POWER			
L702	1-419-878-21	COIL, POWER			
		< TRANSISTOR >			
Q704	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q705	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q706	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q707	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q708	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q710	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q713	8-729-027-58	TRANSISTOR	DTC143ZKA-T146		
Q717	8-729-054-36	FET	UPA1716G-E2		
		< RESISTOR >			
R702	1-216-296-00	SHORT CHIP	0		
R703	1-216-845-11	RES-CHIP	100K	5%	1/10W
R704	1-216-845-11	RES-CHIP	100K	5%	1/10W
R705	1-218-732-11	METAL CHIP	47K	0.5%	1/16W
R706	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R707	1-218-724-11	METAL CHIP	22K	0.5%	1/16W
R708	1-218-727-11	METAL CHIP	30K	0.5%	1/16W
R710	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R711	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R713	1-218-721-11	METAL CHIP	16K	0.5%	1/16W
R714	1-218-745-11	METAL CHIP	160K	0.5%	1/16W
R715	1-218-733-11	METAL CHIP	51K	0.5%	1/16W
R716	1-216-861-11	RES-CHIP	2.2M	5%	1/10W
R718	1-216-841-11	RES-CHIP	47K	5%	1/10W
R720	1-216-861-11	RES-CHIP	2.2M	5%	1/10W
R721	1-216-797-11	RES-CHIP	10	5%	1/10W
R722	1-218-446-11	RES-CHIP	1	5%	1/10W
R723	1-218-446-11	RES-CHIP	1	5%	1/10W
R724	1-218-744-11	METAL CHIP	150K	0.5%	1/16W
R726	1-218-744-11	METAL CHIP	150K	0.5%	1/16W
R727	1-218-734-11	METAL CHIP	56K	0.5%	1/16W
R732	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R733	1-245-113-21	RES-CHIP	0.015	1%	1W
R734	1-245-113-21	RES-CHIP	0.015	1%	1W
R735	1-216-845-11	RES-CHIP	100K	5%	1/10W
R747	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R758	1-216-864-11	SHORT CHIP	0		
R759	1-216-864-11	SHORT CHIP	0		
R760	1-216-864-11	SHORT CHIP	0		
R762	1-216-845-11	RES-CHIP	100K	5%	1/10W
R763	1-216-864-11	SHORT CHIP	0		
R766	1-216-864-11	SHORT CHIP	0		
R767	1-216-864-11	SHORT CHIP	0		
R768	1-216-864-11	SHORT CHIP	0		
R770	1-216-864-11	SHORT CHIP	0		
R772	1-216-864-11	SHORT CHIP	0		
R773	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R776	1-216-864-11	SHORT CHIP	0		
R777	1-216-864-11	SHORT CHIP	0		
R778	1-216-845-11	RES-CHIP	100K	5%	1/10W
R779	1-216-845-11	RES-CHIP	100K	5%	1/10W
R780	1-216-845-11	RES-CHIP	100K	5%	1/10W
R781	1-216-845-11	RES-CHIP	100K	5%	1/10W
R785	1-216-864-11	SHORT CHIP	0		
R786	1-216-864-11	SHORT CHIP	0		
R787	1-216-864-11	SHORT CHIP	0		
R788	1-216-864-11	SHORT CHIP	0		
R789	1-216-864-11	SHORT CHIP	0		
R790	1-216-864-11	SHORT CHIP	0		
R791	1-216-864-11	SHORT CHIP	0		
R793	1-216-864-11	SHORT CHIP	0		
R794	1-216-864-11	SHORT CHIP	0		
R795	1-216-864-11	SHORT CHIP	0		
R796	1-216-864-11	SHORT CHIP	0		
**********					
	A-3274-561-A	SERVO BOARD, COMPLETE (for SERVICE)			
		**********			
		< CAPACITOR >			
C1	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C4	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C5	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C6	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C7	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C8	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C9	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C10	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C11	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C12	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C13	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C14	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C15	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C16	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C17	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C18	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C19	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C20	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C21	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C22	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C23	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C24	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C25	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C26	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C27	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C28	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C29	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C30	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C31	1-115-156-11	CERAMIC CHIP	1uF		10V
C32	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C33	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C34	1-162-909-11	CERAMIC CHIP	4PF	0.25PF	50V
C35	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

SERVO

Ref. No.	Part No.	Description			Remark
C36	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C37	1-115-156-11	CERAMIC CHIP	1uF		10V
C38	1-115-156-11	CERAMIC CHIP	1uF		10V
C39	1-115-156-11	CERAMIC CHIP	1uF		10V
C40	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C41	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C42	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C43	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C44	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C45	1-162-925-11	CERAMIC CHIP	68PF	5%	50V
C46	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C47	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C48	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C50	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C52	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C53	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C54	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C55	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C56	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C57	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C58	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C59	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C60	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C61	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C62	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C63	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C64	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C65	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C66	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C67	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C68	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C69	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C70	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C71	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C76	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C77	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C78	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C79	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C80	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C81	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C82	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C83	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C84	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C85	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C86	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C87	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C88	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C89	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C90	1-104-851-11	TANTALUM CHIP	10uF	20%	10V
C91	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C92	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C93	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C94	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C95	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C96	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C97	1-104-852-11	TANTALUM CHIP	22uF	20%	10V
C98	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
CN1	1-691-377-21	CONNECTOR, FFC/FPC 13P	
* CN2	1-785-877-21	HOUSING, CONNECTOR 4P	
CN3	1-784-342-21	HOUSING, CONNECTOR 2P	
CN5	1-794-501-11	CONNECTOR, FFC/FPC (ZIF) 4P	
CN6	1-691-358-21	CONNECTOR, FFC/FPC (ZIF) 20P	
CN7	1-816-336-11	CONNECTOR, FFC/FPC (ZIF) 40P	
CN8	1-766-335-21	CONNECTOR, FFC/FPC 5P	
		< DIODE >	
D1	6-500-274-01	LED CL-220UB-X-TS-A-E (OPEN/CLOSE ⏏)	
D2	6-500-274-01	LED CL-220UB-X-TS-A-E	(TRAY ILLUMINATION)
D3	6-500-274-01	LED CL-220UB-X-TS-A-E	(TRAY ILLUMINATION)
D5	6-500-274-01	LED CL-220UB-X-TS-A-E	(FRONT ILLUMINATION (TRAY))
D6	8-719-060-48	DIODE RB751V-40TE-17	
D7	8-719-069-28	DIODE 1SS400TE-61	
D8	8-719-069-28	DIODE 1SS400TE-61	
D9	8-719-422-46	DIODE MA8056-TX	
D10	8-719-069-28	DIODE 1SS400TE-61	
D11	8-719-069-28	DIODE 1SS400TE-61	
D12	8-719-422-46	DIODE MA8056-TX	
D13	8-719-988-61	DIODE 1SS355TE-17	
		< FERRITE BEAD >	
FB1	1-469-121-21	FERRITE 0uH	
FB2	1-469-121-21	FERRITE 0uH	
FB3	1-469-121-21	FERRITE 0uH	
FB4	1-469-121-21	FERRITE 0uH	
FB5	1-469-121-21	FERRITE 0uH	
FB6	1-469-121-21	FERRITE 0uH	
FB7	1-469-121-21	FERRITE 0uH	
FB8	1-469-121-21	FERRITE 0uH	
FB9	1-469-121-21	FERRITE 0uH	
FB10	1-469-121-21	FERRITE 0uH	
FB11	1-469-121-21	FERRITE 0uH	
FB12	1-469-121-21	FERRITE 0uH	
FB13	1-469-121-21	FERRITE 0uH	
FB14	1-469-121-21	FERRITE 0uH	
FB15	1-469-121-21	FERRITE 0uH	
FB16	1-469-121-21	FERRITE 0uH	
FB17	1-469-121-21	FERRITE 0uH	
FB18	1-469-121-21	FERRITE 0uH	
FB19	1-469-121-21	FERRITE 0uH	
FB20	1-469-121-21	FERRITE 0uH	
FB21	1-469-121-21	FERRITE 0uH	
FB22	1-469-121-21	FERRITE 0uH	
FB23	1-469-121-21	FERRITE 0uH	
FB24	1-469-121-21	FERRITE 0uH	
FB25	1-469-121-21	FERRITE 0uH	
FB26	1-469-121-21	FERRITE 0uH	
FB27	1-469-121-21	FERRITE 0uH	
FB28	1-469-121-21	FERRITE 0uH	
FB29	1-469-121-21	FERRITE 0uH	
FB30	1-469-121-21	FERRITE 0uH	

SERVO

Ref. No.	Part No.	Description			Remark
		< IC >			
* IC1	6-700-863-01	IC LA9246T-TLM			
IC2	6-700-862-01	IC TK71520ASCL			
IC3	8-759-347-09	IC NJU7034V-TE2			
* IC5	6-700-865-01	IC BD6609FV			
* IC6	6-800-609-01	IC BA5918FP-Y			
* IC7	6-700-924-01	IC XC61CN4602MR			
* IC8	6-700-866-01	IC LC895300			
* IC9	6-802-070-01	IC NX29F010-70T-550D02			
IC10	8-759-693-13	IC NJM12904V (TE2)			
IC12	8-759-347-09	IC NJU7034V-TE2			
		< COIL >			
L1	1-414-398-11	INDUCTOR	10uH		
L2	1-414-398-11	INDUCTOR	10uH		
L3	1-414-398-11	INDUCTOR	10uH		
L4	1-414-398-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q1	8-729-026-49	TRANSISTOR	2SA1037AK-T146-QR		
Q2	8-729-027-57	TRANSISTOR	DTC143XKA-T146		
Q3	8-729-027-57	TRANSISTOR	DTC143XKA-T146		
Q4	8-729-027-57	TRANSISTOR	DTC143XKA-T146		
Q5	8-729-027-57	TRANSISTOR	DTC143XKA-T146		
Q6	8-729-106-68	TRANSISTOR	2SD1664-T100-Q		
Q7	8-729-927-99	TRANSISTOR	2SC4617TL-Q		
Q8	8-729-027-57	TRANSISTOR	DTC143XKA-T146		
Q9	8-729-027-57	TRANSISTOR	DTC143XKA-T146		
Q10	8-729-927-99	TRANSISTOR	2SC4617TL-Q		
		< RESISTOR >			
R1	1-216-797-11	RES-CHIP	10	5%	1/10W
R2	1-218-692-11	METAL CHIP	1K	0.5%	1/16W
R3	1-218-694-11	METAL CHIP	1.2K	0.5%	1/16W
R4	1-218-691-11	METAL CHIP	910	0.5%	1/16W
R5	1-218-694-11	METAL CHIP	1.2K	0.5%	1/16W
R6	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R7	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R8	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R9	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R10	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R11	1-216-839-11	RES-CHIP	33K	5%	1/10W
R12	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R13	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R14	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R15	1-218-446-11	RES-CHIP	1	5%	1/10W
R16	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R17	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R18	1-218-446-11	RES-CHIP	1	5%	1/10W
R19	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R20	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R21	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R22	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R23	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R24	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R25	1-216-821-11	RES-CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R26	1-216-833-11	RES-CHIP	10K	5%	1/10W
R27	1-216-833-11	RES-CHIP	10K	5%	1/10W
R28	1-218-272-11	RES-CHIP	5.1K	5%	1/10W
R30	1-216-833-11	RES-CHIP	10K	5%	1/10W
R31	1-216-821-11	RES-CHIP	1K	5%	1/10W
R33	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R34	1-216-821-11	RES-CHIP	1K	5%	1/10W
R35	1-216-821-11	RES-CHIP	1K	5%	1/10W
R36	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
R38	1-216-864-11	SHORT CHIP	0		
R39	1-216-864-11	SHORT CHIP	0		
R41	1-216-821-11	RES-CHIP	1K	5%	1/10W
R42	1-216-819-11	RES-CHIP	680	5%	1/10W
R43	1-216-864-11	SHORT CHIP	0		
R44	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R45	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R47	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R48	1-218-296-11	RES-CHIP	75K	5%	1/10W
R49	1-218-296-11	RES-CHIP	75K	5%	1/10W
R50	1-216-833-11	RES-CHIP	10K	5%	1/10W
R51	1-216-828-11	RES-CHIP	3.9K	5%	1/10W
R52	1-216-821-11	RES-CHIP	1K	5%	1/10W
R55	1-216-835-11	RES-CHIP	15K	5%	1/10W
R56	1-216-837-11	RES-CHIP	22K	5%	1/10W
R57	1-216-840-11	RES-CHIP	39K	5%	1/10W
R59	1-216-809-11	RES-CHIP	100	5%	1/10W
R60	1-216-821-11	RES-CHIP	1K	5%	1/10W
R63	1-216-809-11	RES-CHIP	100	5%	1/10W
R64	1-216-821-11	RES-CHIP	1K	5%	1/10W
R65	1-216-833-11	RES-CHIP	10K	5%	1/10W
R66	1-216-789-11	RES-CHIP	2.2	5%	1/10W
R67	1-216-789-11	RES-CHIP	2.2	5%	1/10W
R68	1-216-821-11	RES-CHIP	1K	5%	1/10W
R69	1-216-835-11	RES-CHIP	15K	5%	1/10W
R70	1-216-797-11	RES-CHIP	10	5%	1/10W
R71	1-216-833-11	RES-CHIP	10K	5%	1/10W
R72	1-216-857-11	RES-CHIP	1M	5%	1/10W
R73	1-216-854-11	RES-CHIP	560K	5%	1/10W
R74	1-216-853-11	RES-CHIP	470K	5%	1/10W
R75	1-216-814-11	RES-CHIP	270	5%	1/10W
R81	1-216-834-11	RES-CHIP	12K	5%	1/10W
R82	1-216-834-11	RES-CHIP	12K	5%	1/10W
R83	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R84	1-216-835-11	RES-CHIP	15K	5%	1/10W
R85	1-216-837-11	RES-CHIP	22K	5%	1/10W
R86	1-216-837-11	RES-CHIP	22K	5%	1/10W
R87	1-216-833-11	RES-CHIP	10K	5%	1/10W
R88	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R89	1-216-845-11	RES-CHIP	100K	5%	1/10W
R90	1-216-832-11	RES-CHIP	8.2K	5%	1/10W
R91	1-216-849-11	RES-CHIP	220K	5%	1/10W
R92	1-216-833-11	RES-CHIP	10K	5%	1/10W
R93	1-216-833-11	RES-CHIP	10K	5%	1/10W
R94	1-216-864-11	SHORT CHIP	0		
R95	1-216-833-11	RES-CHIP	10K	5%	1/10W
R97	1-216-833-11	RES-CHIP	10K	5%	1/10W
R98	1-216-797-11	RES-CHIP	10	5%	1/10W
R99	1-216-857-11	RES-CHIP	1M	5%	1/10W

Ref. No.	Part No.	Description			Remark
R100	1-216-811-11	RES-CHIP	150	5%	1/10W
R102	1-216-797-11	RES-CHIP	10	5%	1/10W
R103	1-216-797-11	RES-CHIP	10	5%	1/10W
R104	1-216-833-11	RES-CHIP	10K	5%	1/10W
R105	1-216-833-11	RES-CHIP	10K	5%	1/10W
R107	1-216-833-11	RES-CHIP	10K	5%	1/10W
R108	1-216-833-11	RES-CHIP	10K	5%	1/10W
R109	1-216-833-11	RES-CHIP	10K	5%	1/10W
R111	1-216-816-11	RES-CHIP	390	5%	1/10W
R115	1-216-808-11	RES-CHIP	82	5%	1/10W
R116	1-216-808-11	RES-CHIP	82	5%	1/10W
R117	1-216-808-11	RES-CHIP	82	5%	1/10W
R118	1-216-808-11	RES-CHIP	82	5%	1/10W
R120	1-216-808-11	RES-CHIP	82	5%	1/10W
R122	1-216-801-11	RES-CHIP	22	5%	1/10W
R123	1-216-808-11	RES-CHIP	82	5%	1/10W
R124	1-216-801-11	RES-CHIP	22	5%	1/10W
R125	1-216-808-11	RES-CHIP	82	5%	1/10W
R126	1-216-808-11	RES-CHIP	82	5%	1/10W
R127	1-216-801-11	RES-CHIP	22	5%	1/10W
R128	1-216-803-11	RES-CHIP	33	5%	1/10W
R129	1-216-803-11	RES-CHIP	33	5%	1/10W
R130	1-216-803-11	RES-CHIP	33	5%	1/10W
R131	1-216-803-11	RES-CHIP	33	5%	1/10W
R132	1-216-803-11	RES-CHIP	33	5%	1/10W
R133	1-216-803-11	RES-CHIP	33	5%	1/10W
R134	1-216-803-11	RES-CHIP	33	5%	1/10W
R135	1-216-803-11	RES-CHIP	33	5%	1/10W
R136	1-216-803-11	RES-CHIP	33	5%	1/10W
R137	1-216-803-11	RES-CHIP	33	5%	1/10W
R138	1-216-803-11	RES-CHIP	33	5%	1/10W
R139	1-216-803-11	RES-CHIP	33	5%	1/10W
R140	1-216-803-11	RES-CHIP	33	5%	1/10W
R141	1-216-803-11	RES-CHIP	33	5%	1/10W
R142	1-216-803-11	RES-CHIP	33	5%	1/10W
R143	1-216-803-11	RES-CHIP	33	5%	1/10W
R144	1-216-821-11	RES-CHIP	1K	5%	1/10W
R146	1-216-833-11	RES-CHIP	10K	5%	1/10W
R147	1-216-833-11	RES-CHIP	10K	5%	1/10W
R148	1-216-816-11	RES-CHIP	390	5%	1/10W
R149	1-216-864-11	SHORT CHIP	0		
R150	1-216-816-11	RES-CHIP	390	5%	1/10W
R151	1-216-816-11	RES-CHIP	390	5%	1/10W
R157	1-216-816-11	RES-CHIP	390	5%	1/10W
		< SWITCH >			
S1	1-529-565-41	SWITCH, PUSH (1 KEY) (CLOSE-END DETECT)			
S2	1-529-565-41	SWITCH, PUSH (1 KEY) (OPEN-END DETECT)			
S3	1-692-088-51	SWITCH, TACTILE (OPEN/CLOSE ⏏)			
		< VIBRATOR >			
X1	1-781-834-21	VIBRATOR, CERAMIC (33.8688MHz)			

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Ref. No.	Part No.	Description			Remark
	A-3274-314-A	SUB BOARD, COMPLETE			
		**********			
	1-824-052-11	CORD, CONNECTION (AUX) (AUX IN/SUB OUT)			
	1-824-055-11	CORD, CONNECTION (ANT)			
*	3-019-565-01	BRACKET (IC)			
*	3-048-454-01	SHIELD (COVER)			
	3-238-881-01	CHASSIS, BACK			
	3-238-885-01	HEAT SINK (R)			
	3-238-887-01	HEAT SINK			
	3-242-209-01	SHEET (PWIC) , RADIATION			
	3-244-641-02	SHEET (A), VIBRATION			
	3-244-647-01	STICK FINGER			
	7-685-792-09	SCREW +PTT 2.6X6 (S)			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-797-09	SCREW +PTT 2.6X16 (S)			
		< TERMINAL >			
BN103	1-694-592-31	TERMINAL			
		< BUZZER >			
BZ361	1-504-920-21	BUZZER			
		< CAPACITOR/SHORT CHIP >			
C101	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C102	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C106	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C107	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C111	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C112	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C113	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C115	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C116	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C117	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C201	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C202	1-126-193-11	ELECT	1uF	20%	50V
C203	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C204	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C205	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C207	1-126-394-11	ELECT CHIP	10uF	20%	16V
C208	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C210	1-126-394-11	ELECT CHIP	10uF	20%	16V
C211	1-126-395-11	ELECT	22uF	20%	16V
C212	1-126-395-11	ELECT	22uF	20%	16V
C213	1-126-394-11	ELECT CHIP	10uF	20%	16V
C215	1-128-995-21	ELECT CHIP	100uF	20%	10V
C216	1-125-701-11	DOUBLE LAYER	0.047F		5.5V
C225	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C226	1-126-204-11	ELECT CHIP	47uF	20%	16V
C301	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C302	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C303	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C304	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C305	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C306	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C307	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C308	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C309	1-162-927-11	CERAMIC CHIP	100PF	5%	50V

SUB

Ref. No.	Part No.	Description			Remark
C310	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C311	1-128-394-11	ELECT CHIP	220uF	20%	10V
C312	1-124-779-00	ELECT CHIP	10uF	20%	16V
C313	1-135-816-21	FILM CHIP	0.012uF	5%	16V
C314	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C315	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C316	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C317	1-135-816-21	FILM CHIP	0.012uF	5%	16V
C318	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C319	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C320	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C321	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C322	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C323	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C325	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C326	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C330	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C331	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C332	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C333	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C335	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C336	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C337	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C338	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C340	1-164-156-11	CERAMIC CHIP	0.1 uF		25V
C341	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C342	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C343	1-126-204-11	ELECT CHIP	47uF	20%	16V
C346	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C347	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C351	1-124-779-00	ELECT CHIP	10uF	20%	16V
C352	1-124-779-00	ELECT CHIP	10uF	20%	16V
C356	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C358	1-126-204-11	ELECT CHIP	47uF	20%	16V
C361	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C365	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C366	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C367	1-216-864-11	SHORT CHIP	0		
C368	1-216-864-11	SHORT CHIP	0		
C369	1-216-864-11	SHORT CHIP	0		
C370	1-216-864-11	SHORT CHIP	0		
C371	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C372	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C373	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C374	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C375	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C376	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C377	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C378	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C379	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C383	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C384	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C385	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C386	1-124-779-00	ELECT CHIP	10uF	20%	16V
C387	1-126-296-00	SHORT CHIP			
C388	1-126-296-00	SHORT CHIP			
C393	1-164-217-11	CERAMIC CHIP	150PF	5%	50V

Ref. No.	Part No.	Description			Remark
C394	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C395	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C396	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C397	1-124-779-00	ELECT CHIP	10uF	20%	16V
C398	1-124-779-00	ELECT CHIP	10uF	20%	16V
C401	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C402	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C403	1-126-204-11	ELECT CHIP	47uF	20%	16V
C404	1-124-779-00	ELECT CHIP	10uF	20%	16V
C411	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C412	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C413	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C435	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C436	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C501	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C502	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C503	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C504	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C505	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C506	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C508	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C510	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C511	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C513	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C515	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C516	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C521	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C522	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C523	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C525	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C541	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C542	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C561	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C562	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C563	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C564	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C571	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C802	1-165-874-21	ELECT CHIP	120uF	20%	6.3V
C805	1-117-713-21	ELECT CHIP	100uF	20%	50V
C807	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C809	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C810	1-135-599-11	ELECT CHIP	39uF	20%	16V
C851	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN301	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD) 6P			
* CN411	1-573-768-21	PIN, CONNECTOR (1.5MM) (SMD) 5P			
* CN521	1-779-056-21	PIN, CONNECTOR (PC BOARD) 5P			
CN524	1-691-384-11	CONNECTOR, FFC/FPC 20P			
CN525	1-816-503-11	CONNECTOR, BOARD TO BOARD 24P			
* CN526	1-778-652-11	CONNECTOR, FFC (ZIF) 50P			
* CN528	1-695-320-21	PIN, CONNECTOR (1.5MM) (SMD) 2P			
		< CONNECTOR/JACK >			
CNJ201	1-793-277-11	PLUG, CONNECTOR 16P			
CNJ302	1-774-699-12	JACK, PIN 4P (AUDIO OUT REAR/FRONT)			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D206	8-719-404-50	DIODE MA111-TX	
D207	8-719-422-41	DIODE MA8051-L-TX	
D208	8-719-404-50	DIODE MA111-TX	
D210	8-719-053-18	DIODE 1SR154-400TE-25	
D221	8-719-053-18	DIODE 1SR154-400TE-25	
D222	8-719-053-18	DIODE 1SR154-400TE-25	
D223	8-719-053-18	DIODE 1SR154-400TE-25	
D231	8-719-422-76	DIODE MA8075-M-TX	
D232	8-719-057-80	DIODE MA8180-M-TX	
D301	8-719-074-47	DIODE CRS02 (TE85L)	
D302	8-719-074-47	DIODE CRS02 (TE85L)	
D303	8-719-074-47	DIODE CRS02 (TE85L)	
D305	8-719-074-47	DIODE CRS02 (TE85L)	
D306	8-719-074-47	DIODE CRS02 (TE85L)	
D307	8-719-074-47	DIODE CRS02 (TE85L)	
D308	8-719-074-47	DIODE CRS02 (TE85L)	
D310	8-719-074-47	DIODE CRS02 (TE85L)	
D311	8-719-404-50	DIODE MA111-TX	
D351	8-719-404-50	DIODE MA111-TX	
D361	8-719-977-12	DIODE MA8068-M-TX	
D411	8-719-820-05	DIODE MA152WA-TX	
D501	8-719-404-50	DIODE MA111-TX	
D505	8-719-404-50	DIODE MA111-TX	
D507	8-719-404-50	DIODE MA111-TX	
D508	8-719-404-50	DIODE MA111-TX	
D510	8-719-060-48	DIODE RB751V-40TE-17	
D511	8-719-060-48	DIODE RB751V-40TE-17	
D512	8-719-060-48	DIODE RB751V-40TE-17	
D513	8-719-060-48	DIODE RB751V-40TE-17	
D514	8-719-060-48	DIODE RB751V-40TE-17	
D520	8-719-404-50	DIODE MA111-TX	
D521	8-719-404-50	DIODE MA111-TX	
D522	8-719-404-50	DIODE MA111-TX	
D524	8-719-060-48	DIODE RB751V-40TE-17	
D533	8-719-017-58	DIODE MA8068-TX	
D535	8-719-078-81	DIODE DF5A6.8FU (TE85R)	
D536	8-719-078-81	DIODE DF5A6.8FU (TE85R)	
D537	8-719-017-58	DIODE MA8068-TX	
D540	8-719-057-80	DIODE MA8180-M-TX	
D541	8-719-017-58	DIODE MA8068-TX	
D542	8-719-017-58	DIODE MA8068-TX	
D802	8-719-053-18	DIODE 1SR154-400TE-25	
D803	8-719-053-18	DIODE 1SR154-400TE-25	
D804	8-719-055-30	DIODE D1FS4A-TA	
D805	8-719-055-30	DIODE D1FS4A-TA	
D806	8-719-055-33	DIODE D1FL20U-TA	
D851	8-719-801-78	DIODE MA152WK-TX	
D852	8-719-801-78	DIODE MA152WK-TX	
D853	8-719-423-23	DIODE MA8110-M-TX	
		< FUSE >	
F201	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
		< FERRITE BEAD >	
FB331	1-414-235-22	FERRITE 0uH	
FB332	1-414-235-22	FERRITE 0uH	
FB333	1-414-235-22	FERRITE 0uH	
FB501	1-469-094-21	FERRITE 0uH	
FB502	1-469-094-21	FERRITE 0uH	
FB505	1-469-094-21	FERRITE 0uH	
FB506	1-469-094-21	FERRITE 0uH	
FB507	1-469-094-21	FERRITE 0uH	
FB508	1-469-094-21	FERRITE 0uH	
FB510	1-469-094-21	FERRITE 0uH	
FB511	1-469-094-21	FERRITE 0uH	
FB512	1-469-094-21	FERRITE 0uH	
FB513	1-469-094-21	FERRITE 0uH	
FB515	1-469-094-21	FERRITE 0uH	
FB516	1-469-094-21	FERRITE 0uH	
FB517	1-469-094-21	FERRITE 0uH	
FB518	1-469-094-21	FERRITE 0uH	
FB519	1-469-094-21	FERRITE 0uH	
FB520	1-469-094-21	FERRITE 0uH	
FB521	1-469-094-21	FERRITE 0uH	
		< FILTER >	
FL201	1-234-562-21	FILTER, EMI REMOVAL (SMD)	
FL202	1-234-562-21	FILTER, EMI REMOVAL (SMD)	
FL203	1-234-562-21	FILTER, EMI REMOVAL (SMD)	
FL204	1-234-498-21	FILTER, EMI	
FL205	1-234-498-21	FILTER, EMI	
		< IC >	
IC201	8-759-347-49	IC BA3918-V2	
IC301	6-701-403-01	IC TDA7406	
IC302	8-759-422-21	IC NJM4580V (TE2)	
IC303	8-759-422-21	IC NJM4580V (TE2)	
IC304	8-759-486-44	IC TDA7386	
IC372	8-759-422-21	IC NJM4580V (TE2)	
IC391	8-759-284-63	IC TA78M05F (TE16L)	
IC401	8-759-668-14	IC PQ09DZ1U	
IC402	8-759-075-66	IC TA75S01F (TE85R)	
IC411	8-759-527-33	IC LB1930M-TLM	
IC501	6-801-657-01	IC MB90F574APMT-G-LPN1	
IC502	8-759-560-17	IC RS5C348A-E2	
IC503	8-759-682-69	IC XC61CN4302MR	
IC800	8-759-598-63	IC LM2577SX-ADJ	
		< SHORT/COIL >	
L101	1-216-864-11	SHORT CHIP 0	
L501	1-414-235-22	FERRITE 0uH	
L800	1-424-911-11	COIL, POWER	
		< MOTOR >	
M501	1-763-834-11	FAN, DC	
		< TRANSISTOR >	
Q201	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q202	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q203	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q204	8-729-019-00	TRANSISTOR 2SD2394-G	
Q206	8-729-920-85	TRANSISTOR 2SD1664-T101-QR	
Q231	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q232	8-729-901-21	TRANSISTOR DTC144EK-T146	

SUB

Ref. No.	Part No.	Description			Remark
Q233	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		
Q301	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q302	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q303	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q304	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q305	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q306	8-729-901-21	TRANSISTOR	DTC144EK-T146		
Q351	8-729-901-04	TRANSISTOR	DTA114EK-T146		
Q352	8-729-901-21	TRANSISTOR	DTC144EK-T146		
Q361	8-729-901-21	TRANSISTOR	DTC144EK-T146		
Q372	8-729-106-60	TRANSISTOR	2SB1132-T101-QR		
Q373	8-729-901-21	TRANSISTOR	DTC144EK-T146		
Q521	8-729-901-04	TRANSISTOR	DTA114EK-T146		
Q529	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q530	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q531	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q801	8-729-054-36	FET	UPA1716G-E2		
Q802	8-729-901-21	TRANSISTOR	DTC144EK-T146		
Q851	8-729-019-00	TRANSISTOR	2SD2394-G		
Q852	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q853	8-729-106-60	TRANSISTOR	2SB1132-T101-QR		
Q854	8-729-901-21	TRANSISTOR	DTC144EK-T146		
Q855	8-729-040-14	TRANSISTOR	IMD10A-T108		
		< RESISTOR >			
R101	1-216-797-11	RES-CHIP	10	5%	1/10W
R102	1-216-864-11	SHORT CHIP	0		
R103	1-216-864-11	SHORT CHIP	0		
R105	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R106	1-216-845-11	RES-CHIP	100K	5%	1/10W
R107	1-216-841-11	RES-CHIP	47K	5%	1/10W
R108	1-216-864-11	SHORT CHIP	0		
R202	1-216-049-11	RES-CHIP	1K	5%	1/10W
R203	1-216-841-11	RES-CHIP	47K	5%	1/10W
R205	1-216-833-11	RES-CHIP	10K	5%	1/10W
R206	1-216-833-11	RES-CHIP	10K	5%	1/10W
R207	1-216-845-11	RES-CHIP	100K	5%	1/10W
R208	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R210	1-216-841-11	RES-CHIP	47K	5%	1/10W
R211	1-216-841-11	RES-CHIP	47K	5%	1/10W
R212	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R213	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R215	1-216-845-11	RES-CHIP	100K	5%	1/10W
R216	1-216-837-11	RES-CHIP	22K	5%	1/10W
R217	1-216-845-11	RES-CHIP	100K	5%	1/10W
R218	1-216-845-11	RES-CHIP	100K	5%	1/10W
R220	1-216-845-11	RES-CHIP	100K	5%	1/10W
R221	1-216-833-11	RES-CHIP	10K	5%	1/10W
R222	1-216-833-11	RES-CHIP	10K	5%	1/10W
R225	1-216-049-11	RES-CHIP	1K	5%	1/10W
R226	1-216-049-11	RES-CHIP	1K	5%	1/10W
R227	1-216-849-11	RES-CHIP	220K	5%	1/10W
R228	1-216-849-11	RES-CHIP	220K	5%	1/10W
R229	1-216-817-11	RES-CHIP	470	5%	1/10W
R301	1-216-841-11	RES-CHIP	47K	5%	1/10W
R302	1-216-809-11	RES-CHIP	100	5%	1/10W
R303	1-216-809-11	RES-CHIP	100	5%	1/10W
R304	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R305	1-216-809-11	RES-CHIP	100	5%	1/10W
R306	1-216-809-11	RES-CHIP	100	5%	1/10W
R307	1-216-809-11	RES-CHIP	100	5%	1/10W
R308	1-216-809-11	RES-CHIP	100	5%	1/10W
R309	1-216-809-11	RES-CHIP	100	5%	1/10W
R310	1-216-809-11	RES-CHIP	100	5%	1/10W
R311	1-216-833-11	RES-CHIP	10K	5%	1/10W
R312	1-216-833-11	RES-CHIP	10K	5%	1/10W
R313	1-216-295-00	SHORT CHIP	0		
R315	1-216-833-11	RES-CHIP	10K	5%	1/10W
R316	1-216-833-11	RES-CHIP	10K	5%	1/10W
R317	1-216-833-11	RES-CHIP	10K	5%	1/10W
R318	1-216-833-11	RES-CHIP	10K	5%	1/10W
R321	1-216-833-11	RES-CHIP	10K	5%	1/10W
R322	1-216-833-11	RES-CHIP	10K	5%	1/10W
R323	1-216-073-00	RES-CHIP	10K	5%	1/10W
R324	1-216-073-00	RES-CHIP	10K	5%	1/10W
R326	1-216-809-11	RES-CHIP	100	5%	1/10W
R327	1-216-809-11	RES-CHIP	100	5%	1/10W
R328	1-216-809-11	RES-CHIP	100	5%	1/10W
R330	1-216-809-11	RES-CHIP	100	5%	1/10W
R331	1-216-809-11	RES-CHIP	100	5%	1/10W
R332	1-216-025-11	RES-CHIP	100	5%	1/10W
R333	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R334	1-216-025-11	RES-CHIP	100	5%	1/10W
R335	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R337	1-216-833-11	RES-CHIP	10K	5%	1/10W
R338	1-216-833-11	RES-CHIP	10K	5%	1/10W
R340	1-216-833-11	RES-CHIP	10K	5%	1/10W
R341	1-216-833-11	RES-CHIP	10K	5%	1/10W
R342	1-216-821-11	RES-CHIP	1K	5%	1/10W
R343	1-216-821-11	RES-CHIP	1K	5%	1/10W
R344	1-216-833-11	RES-CHIP	10K	5%	1/10W
R345	1-216-821-11	RES-CHIP	1K	5%	1/10W
R346	1-216-821-11	RES-CHIP	1K	5%	1/10W
R347	1-216-295-00	SHORT CHIP	0		
R348	1-216-295-00	SHORT CHIP	0		
R349	1-216-295-00	SHORT CHIP	0		
R350	1-216-295-00	SHORT CHIP	0		
R351	1-216-833-11	RES-CHIP	10K	5%	1/10W
R352	1-216-821-11	RES-CHIP	1K	5%	1/10W
R353	1-216-295-00	SHORT CHIP	0		
R354	1-216-295-00	SHORT CHIP	0		
R356	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R357	1-216-805-11	RES-CHIP	47	5%	1/10W
R362	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R363	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R365	1-216-864-11	SHORT CHIP	0		
R366	1-216-295-00	SHORT CHIP	0		
R373	1-216-833-11	RES-CHIP	10K	5%	1/10W
R376	1-216-833-11	RES-CHIP	10K	5%	1/10W
R381	1-216-833-11	RES-CHIP	10K	5%	1/10W
R383	1-216-833-11	RES-CHIP	10K	5%	1/10W
R386	1-216-833-11	RES-CHIP	10K	5%	1/10W
R387	1-216-833-11	RES-CHIP	10K	5%	1/10W
R388	1-216-833-11	RES-CHIP	10K	5%	1/10W
R389	1-216-833-11	RES-CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R391	1-216-833-11	RES-CHIP	10K	5%	1/10W
R393	1-216-833-11	RES-CHIP	10K	5%	1/10W
R397	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R398	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R399	1-216-864-11	SHORT CHIP	0		
R431	1-218-236-11	RES-CHIP	1	10%	1/4W
R434	1-216-833-11	RES-CHIP	10K	5%	1/10W
R435	1-216-845-11	RES-CHIP	100K	5%	1/10W
R437	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R438	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R440	1-218-236-11	RES-CHIP	1	10%	1/4W
R501	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R516	1-216-845-11	RES-CHIP	100K	5%	1/10W
R517	1-216-864-11	SHORT CHIP	0		
R519	1-216-864-11	SHORT CHIP	0		
R522	1-216-864-11	SHORT CHIP	0		
R523	1-216-864-11	SHORT CHIP	0		
R525	1-216-864-11	SHORT CHIP	0		
R527	1-216-864-11	SHORT CHIP	0		
R528	1-216-815-11	RES-CHIP	330	5%	1/10W
R529	1-216-809-11	RES-CHIP	100	5%	1/10W
R530	1-216-864-11	SHORT CHIP	0		
R531	1-216-864-11	SHORT CHIP	0		
R532	1-216-864-11	SHORT CHIP	0		
R533	1-216-864-11	SHORT CHIP	0		
R537	1-216-864-11	SHORT CHIP	0		
R538	1-216-864-11	SHORT CHIP	0		
R540	1-216-864-11	SHORT CHIP	0		
R542	1-216-864-11	SHORT CHIP	0		
R546	1-216-845-11	RES-CHIP	100K	5%	1/10W
R550	1-216-864-11	SHORT CHIP	0		
R554	1-216-845-11	RES-CHIP	100K	5%	1/10W
R559	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R562	1-216-837-11	RES-CHIP	22K	5%	1/10W
R563	1-216-864-11	SHORT CHIP	0		
R564	1-216-864-11	SHORT CHIP	0		
R567	1-216-864-11	SHORT CHIP	0		
R568	1-216-845-11	RES-CHIP	100K	5%	1/10W
R569	1-216-845-11	RES-CHIP	100K	5%	1/10W
R570	1-216-864-11	SHORT CHIP	0		
R571	1-216-864-11	SHORT CHIP	0		
R572	1-216-864-11	SHORT CHIP	0		
R573	1-216-864-11	SHORT CHIP	0		
R574	1-216-864-11	SHORT CHIP	0		
R578	1-216-845-11	RES-CHIP	100K	5%	1/10W
R580	1-216-833-11	RES-CHIP	10K	5%	1/10W
R581	1-216-833-11	RES-CHIP	10K	5%	1/10W
R582	1-216-845-11	RES-CHIP	100K	5%	1/10W
R585	1-216-845-11	RES-CHIP	100K	5%	1/10W
R592	1-216-864-11	SHORT CHIP	0		
R593	1-216-864-11	SHORT CHIP	0		
R595	1-216-821-11	RES-CHIP	1K	5%	1/10W
R599	1-216-833-11	RES-CHIP	10K	5%	1/10W
R601	1-216-845-11	RES-CHIP	100K	5%	1/10W
R602	1-216-841-11	RES-CHIP	47K	5%	1/10W
R606	1-216-864-11	SHORT CHIP	0		
R607	1-216-864-11	SHORT CHIP	0		
R610	1-216-864-11	SHORT CHIP	0		
R611	1-216-845-11	RES-CHIP	100K	5%	1/10W
R612	1-216-845-11	RES-CHIP	100K	5%	1/10W
R613	1-216-845-11	RES-CHIP	100K	5%	1/10W
R627	1-216-864-11	SHORT CHIP	0		
R638	1-216-864-11	SHORT CHIP	0		
R641	1-216-853-11	RES-CHIP	470K	5%	1/10W
R642	1-216-845-11	RES-CHIP	100K	5%	1/10W
R644	1-216-845-11	RES-CHIP	100K	5%	1/10W
R645	1-216-864-11	SHORT CHIP	0		
R646	1-216-845-11	RES-CHIP	100K	5%	1/10W
R648	1-216-841-11	RES-CHIP	47K	5%	1/10W
R650	1-216-845-11	RES-CHIP	100K	5%	1/10W
R681	1-216-845-11	RES-CHIP	100K	5%	1/10W
R682	1-216-845-11	RES-CHIP	100K	5%	1/10W
R687	1-216-295-00	SHORT CHIP	0		
R688	1-216-833-11	RES-CHIP	10K	5%	1/10W
R689	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R692	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R698	1-216-864-11	SHORT CHIP	0		
R800	1-216-230-00	RES-CHIP	22K	5%	1/8W
R801	1-216-230-00	RES-CHIP	22K	5%	1/8W
R803	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R804	1-218-754-11	METAL CHIP	120K	0.5%	1/10W
R805	1-216-296-00	SHORT CHIP	0		
R806	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R807	1-218-704-11	METAL CHIP	3.3K	0.5%	1/16W
R808	1-216-833-11	RES-CHIP	10K	5%	1/10W
R809	1-216-864-11	SHORT CHIP	0		
R851	1-216-821-11	RES-CHIP	1K	5%	1/10W
R852	1-216-833-11	RES-CHIP	10K	5%	1/10W
R853	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R855	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R1501	1-216-864-11	SHORT CHIP	0		
R1502	1-216-864-11	SHORT CHIP	0		
R1541	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1547	1-216-809-11	RES-CHIP	100	5%	1/10W
R1552	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1553	1-216-821-11	RES-CHIP	1K	5%	1/10W
R1562	1-216-864-11	SHORT CHIP	0		
R1564	1-216-864-11	SHORT CHIP	0		
R1565	1-216-864-11	SHORT CHIP	0		
R1582	1-216-864-11	SHORT CHIP	0		
R1587	1-216-864-11	SHORT CHIP	0		
R1588	1-216-864-11	SHORT CHIP	0		
R1589	1-219-286-11	RES-CHIP	680	2%	1/16W
R1590	1-216-864-11	SHORT CHIP	0		

< COMPOSITION CIRCUIT BLOCK >

RB501	1-233-576-11	RES, CHIP NETWORK 100
RB502	1-234-523-21	RES, CHIP NETWORK 0
RB512	1-233-575-11	RES, CHIP NETWORK 22
RB515	1-233-810-21	RES, NETWORK 100K

< TRANSFORMER >

T800	1-437-757-11	TRANSFORMER, DC/DC CONVERTER

SUB **SWITCH**

Ref. No.	Part No.	Description	Remark
		< THERMISTOR >	
THP501	1-810-812-21	THERMISTOR, NTC (1608)	
		< TUNER >	
TUX101	A-3220-812-A	TUNER UNIT (TUX-020)	
		< VIBRATOR >	
X501	1-767-280-21	VIBRATOR, CRYSTAL (3.68MHz)	
X502	1-781-696-31	VIBRATOR, CRYSTAL (32.768kHz)	
**********			
	A-3274-407-A	SWITCH BOARD, COMPLETE	
		**********	

For the parts on the SWITCH board, replace the entire mounted board.

****

		MISCELLANEOUS	
		**********	
10	1-824-017-11	CORD, CONNECTION (DIGITAL I/O CABLE)	
14	1-790-926-41	CORD (WITH CONNECTOR) (POWER)	
18	1-761-522-11	MOUNTED FLEXIBLE PWB	
156	1-477-305-11	UNIT, HARDDISK DRIVE (2.5inch)	
157	1-761-552-11	MOUNTED PWB (HDD CONNECTOR)	
163	1-824-053-11	CABLE, FLEXIBLE FLAT 50P	
415	1-683-084-11	D40P FLEXIBLE BOARD	
416	1-763-734-12	MOTOR FLEXIBLE BOARD	
⚠421	A-3013-977-A	OP ASSY (CDM-3021EBG)	
F1	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
FL900	1-518-814-11	INDICATOR TUBE, FLUORESCENT	
M102	A-3328-299-A	MOTOR BLOCK ASSY, SLED	
M103	A-3315-830-A	SERVICE ASSY, LE MOTOR (TRAY OPEN/CLOSE)	
M601	A-3315-622-A	MOTOR ASSY (FRONT PANEL OPEN/CLOSE)	

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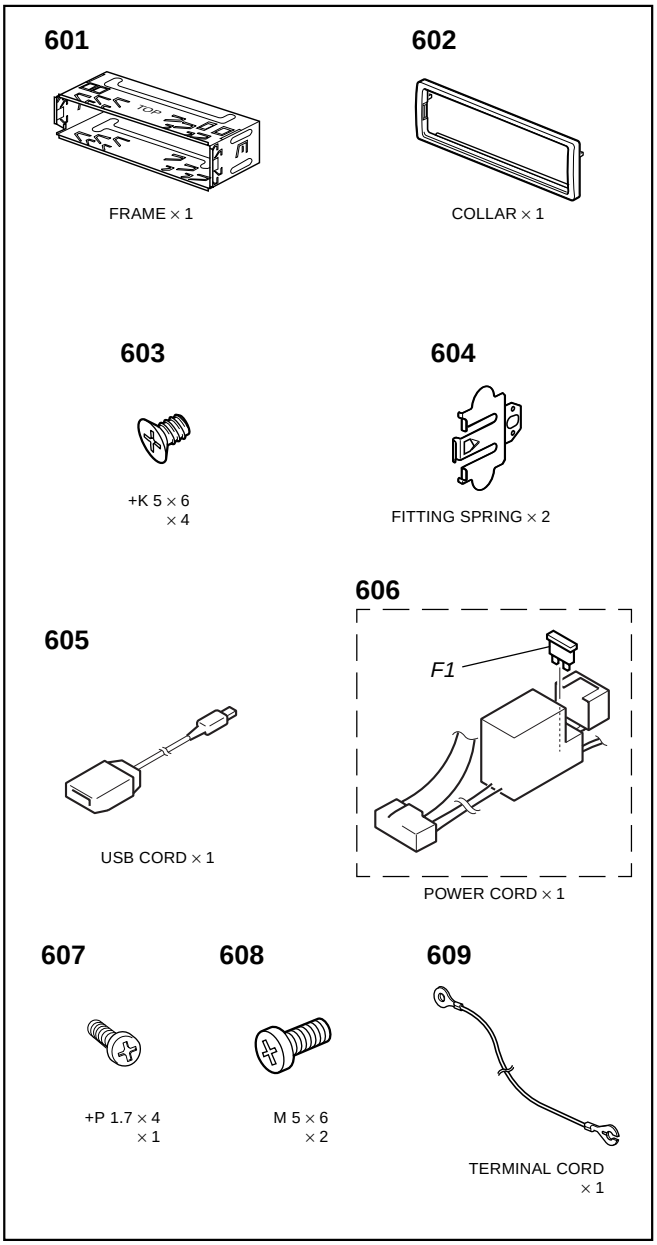
Ref. No.	Part No.	Description	Remark
		ACCESSORIES	
		**********	
	3-242-072-12	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH)	
	3-242-073-13	MANUAL, INSTRUCTION (ENGLISH, FRENCH)	
**********			
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
601	3-009-613-21	FRAME	
602	3-238-544-01	COLLAR	
603	3-031-703-01	SCREW (M5X6), +K	
604	3-027-138-01	SPRING, FITTING	
605	1-824-017-11	CORD, CONNECTION (DIGITAL I/O CABLE)	
606	1-790-926-41	CORD (WITH CONNECTOR) (POWER)	
607	7-627-852-18	SCREW, PRECISION +P 1.7X4 TYPE3	
608	X-3382-379-1	SCREW ASSY (M5X6)	
609	1-575-616-51	CORD (WITH TERMINAL)	
F1	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2002.04	New
1.1	2002.09	Addition of E model and Australian model Addition of items in the servicing notes and test mode Change of all contents of section 4 and correction of exploded views (ENG-02012)
1.2	2003.07	Change of items in the test mode Change of Part No. for accessories (ENG-03010)
1.3	2004.02	Change of Part No. for Ref. No. 401, 408, M103 (ECN-CSA07184)